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BRADLEY'S

1881.

REMINISCENCES OF NEW YORK HARBOR

1896.

AND COMPLETE

**WATER FRONT DIRECTORY**

— OF —

NEW YORK, BROOKLYN AND JERSEY CITY.

By DAVID L. BRADLEY,

(EDITOR AMERICAN SHIPBUILDER.)

7 COENTIES SLIP, NEW YORK,

PRICES:—CLOTH, FLEXIBLE, \$1.00: FULL CLOTH, HEAVY, \$2.00

JUNE, 1896.





## PREFACE.

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**W**HILE editor and proprietor of the MARITIME REPORTER (the first illustrated marine paper in the United States) and when the re-numbering of piers were so misleading, I conceived the idea of publishing a Directory, which, in its originality and accuracy would supply the requirements of not only the shipping community, but the general public as well. It embraced the water fronts of New York, Brooklyn and Jersey City, giving the location of every vessel line (steam and sail) and all business firms along the entire water fronts, accompanied by diagrams of the streets of the three cities, etc. The work was a success from the start, and, owing to its reliability and completeness, gained a flattering reputation and large sales. As fast as changes were made this Directory contained them, thus making it correct in every particular to date of publication, hence the demand for each succeeding edition greatly increased. The present edition embraces many new and original features:—Maps of the Two Entrances to New York Harbor—Sandy Hook and East River—showing the several channels leading thereto; also, two-page chart of New York Upper Bay and Newark Bay, Kill-Von-Kull, and several important inlets on Long Island Sound; the depth of water as per U. S. Government latest surveys are distinctly given; also, maps of Hell Gate, Harlem River, Newtown Creek, Atlantic Basin, Erie Basin, Gowanus Bay, Boundary Line between New York and New Jersey. The Directory alone has twenty-two separate diagrams, showing the streets leading to the water fronts of the three cities, location of all Business Firms, Ocean Steamers, River and Sound Steamboats, Sailing Vessel Lines, Freight Lines, Ferries; in fact, everything along the entire water fronts. There are also tables showing the distance from New York to different parts of the world, including the Hudson River, Long Island Sound, etc., etc.

52 East 34th Street,  
Bayonne, N. J.

DAVID L. BRADLEY.



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# NEW YORK HARBOR.

**T**HIS Harbor is a history in itself, and has been appropriately called "the cradle of steam navigation," for it was here, in 1807, that the first practical and successful venture in steamboating was made. In that year the Clermont was built from designs of Robert Fulton, the inventor. This steamer made her first trip from New York to Albany in thirty-two hours, while it took the packet sloops from four to six days. The rapid success of steam navigation on the Hudson River followed as a necessity, and at the present time that "Queen of Rivers" can boast of the finest and fastest steamers in the world. The first steamship to cross the Atlantic—the Savannah—was also built in New York, by Francis Frickett and David Crocker, at Corlears Hook, East River, from designs by Wm. Scarborough, of Savannah, Ga. The keel was laid in 1818, and she was launched August 22nd of the same year. She was a full-rigged ship of 350 tons burthen, and had a direct acting, low pressure engine of 90 h. p.; diameter of cylinder 40-inches, and 5-foot stroke of piston. The engine was built by Stephen Vail, at Speedwell Iron Works, near Morristown, N. J.; boilers by Daniel Dodd, Elizabethport, N. J.

These were two important events in river and ocean navigation and began a new era in commercial intercourse between the old and the new world, and instilled new life into the shipbuilding industry, so that in 1831 New York City became the leading place in the United States for this branch of business. Among the most prominent shipbuilders located here at that time were the following: Wm. H. Webb, one of America's greatest ship constructors and a most distinguished philanthropist. His famous shipyard was at the foot of Seventh Street, East River. There were also Bergh & Co., Webb & Allen, Ball & Brown, Frickett & Thomas, Smith & Dimon; later, Divine Burtis, Wm. H. Brown, Wm. Colyer, Thos. Colyer, John Englis, and a few others of lesser note. In 1831 the Allaire and Novelty Works were the only builders of note of marine engines; later, Fletcher & Harrison, the Morgan, the Phoenix and a few other engine building works were established.

Three years previous to 1831 the arrivals and departures of river steamers at New York reached 6,400, transporting 320,000 passengers. It is mainly due to the State Canal system that New York City's present supremacy is attributed. If we look back to the commencement of the present century we will find that Pennsylvania led the Empire State in population and wealth. At that time New York City had a population of 60,615, while Philadelphia had 81,000, and even Baltimore came within 1,500 of being up to our Metropolis. No later back than 1820 Philadelphia led our city by 11,931. It was not long, however, after the Erie Canal was opened, ere New York overtook her competitors. The canal in regulating the freight rates of the railroads, by which the public was protected against unjust discrimination and extortionate charges, was the means of booming our port, hence its rapid progress.

The commercial interests of New York City had reached such proportions that her available water front was inadequate to accommodate the increased shipping. But relief came at last—the United States Government heeded the urgent appeals for improving the Harlem River, and it is now navigable from the East River to the Hudson, and wharves are gradually springing up along the intervening seven miles. The importance of this undertaking to the prosperity of New York is inestimable, as it has been needed for many years. It must be borne in mind that two-thirds of the merchandise imported into the United States is received at the port of New York, and two-thirds of the import duties are collected here. Three-fourths of the passengers travelling between the United States and foreign countries come and go by way of New York, and three-fourths of all immigrants land here. The commercial statistics of the port from July 1st, 1894, to July 1st, 1895, show that 3,315 foreign vessels entered and 3,228 cleared; American vessels from foreign ports, 1,022. Total registered tonnage, 12,344,441.

The arrangements of Americans on the ocean are of the most brilliant character. The infant navy in the year of 1802 achieved success which astonished even our most sanguine patriots, and placed the American Republic in the first rank among maritime powers. Then came the period of clipper ships until in New York and Brooklyn yards and commanded by true blue American officers. Most of these vessels had their pens on the East River side and the old resident will recall his feelings of pride and exultation as he saw the Red Jacket, Sovereign of the Seas, and a host of other clippers, sailing those storm-lanes toward the Narrows, or coming up the Harbor with all flags flying, after a successful voyage to London, Liverpool, San Francisco and China. Tugboats were hired by the packet ships in cases of emergency only. It cost \$125.00 to be towed from a pier to three miles beyond Sandy Hook. The long-galops shouted the vessel arrivals and departures in bold head lines, and from their positions were the subject of conversation in all circles. In 1843 the largest sailing ship of 2700 sailing ships from the ocean between New York and leading European ports, as they have done.

The last iron clad battery was conceived by Robert L. Stevens, of Hoboken, N. J., in 1832. It was to have been an iron armored ship, 150 feet in length. The keel was laid at the foot of Fourth Street, Hoboken, in 1842. At odd periods new improvements were designed, and upon his death Mr. Stevens left one million dollars with which to complete the vessel, directing that it should belong to the State of New Jersey. The million was expended suits were brought by heirs, and at last, in 1876, the unfinished war vessel was sold as old material to W. E. Lambier for \$35,000.

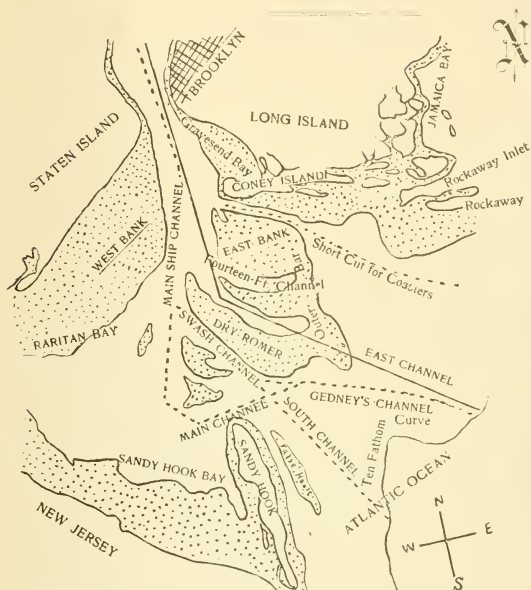
For the protection of the port of New York from pestilential diseases the Provincial Legislature, in 1758, established a quarantine station on Bedloe's Island. In 1768 the station was removed to Governor's Island, and in 1801 it was transferred to Tompkinsville, S. I., remaining there for many years, until the steamship Falcon, in 1850, was used for the purpose, and was anchored just below the Narrows. Between the years 1866 and 1870 an artificial island (Swinsburne Island) was made on West Bank shoal, and quarantine buildings were erected. Between 1868 and 1873 Hoffman Island was made, and is used as a quarantine of observation and isolation for immigrants who have been exposed to dangerous epidemics.

Fort Hamilton, on the eastern shore (Long Island), is located on a military reservation of ninety-six acres. On an artificial island, just off Fort Hamilton, is Fort Lafayette, commenced in 1812 and completed ten years later. It is now used as a storage for ordnance supplies. Fort Wadsworth, across the Narrows from Fort Hamilton, is a three-tiered, aseparate rock of granite. Back of this stands Fort Tompkins, which is heavily armed. On Bedloe's Island is Fort Wood, built in 1841.

Governor's Island was fortified as early as the year 1793, Congress at that time deciding that fortification of wood and sand be erected for the protection of the Harbor of New York. Old Fort Columbus was erected in 1806, and replaced an older fort called after the first Chief Justice, Fort Jay. Since that period the island has been the residence of army officers. Castle William, a picturesque fortress on the northwest point, was built between the years 1818 and 1812. One of its old cannons has boomed north the sunrise and sunset hours for many years. Governor's Island has an area of sixty-five acres. The mean rise and fall of tide is 4.4 feet, maximum, 5.2 feet; minimum, 3.6 feet.

Castle Garden is associated with so many incidents in the past of New York that a history of its various uses, since it ceased to be a fort, and was in warlike trim, would fill many pages. From the early days when its use as a defense of New York ceased, to within the time it was occupied by immigrants, it had received almost every national visitor through its hospitable gates. At first the present building was, or rather its foundations were built by the Government, which had obtained from the city a reservation of the land upon which it stands. When built it was regarded as the strongest fortification which had ever been erected, and stood defiance to all the then known modes of attack. It was not long held as a fortress, its uses being simply as a recruiting station, and were accepted as the army became a favorite resort of fashion. It was afterwards made the landing place for all immigrants, where, under the guardianship of the Board of Commissioners, they found protection. It was formally opened by that Board in 1855. It is now transferred into a public recreation.

## SANDY HOOK ENTRANCE TO NEW YORK HARBOR



## NEW YORK HARBOR

has two entrances, the Main or Sandy Hook entrance, which is equal to any other harbor entrance in the world, and the East River and Hell-Gate entrance, which has been in course of improvement since 1869. About ten years ago, as the foreign commerce of New York increased and the new types of trans-Atlantic steamships of larger size and of greater draught were rapidly superseding the old, the channels which led to our harbor were found shallow to a degree which threatened a total blockade for vessels of the larger tonnage. Steamships of the *Aurania* and *City of Rome* class frequently grounded on

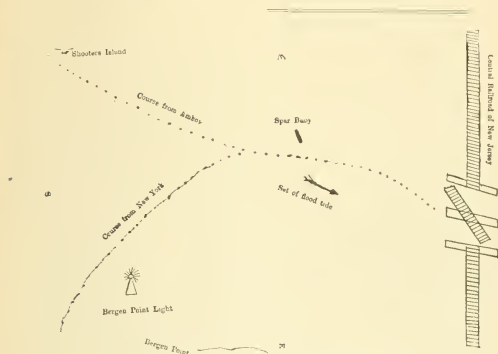
the Bar. The result of this, from a commercial point of view, was obvious. Steamships of enormous carrying capacity were compelled to go out lighter than their limit. This caused a large yearly loss to shippers. On referring to the above diagram it will readily be perceived that the point of Sandy Hook on the south and Coney Island on the north, distant from each other seven miles, form the land barriers of the harbor. beginning at Coney Island, the first deep channel south, lies nearly parallel and close to the shore, useful for small coasters and pleasure steamers going to or coming from the East. A bank intervenes between this channel and the next deep water, known as the Fourteen-Foot-Channel. Then comes the East-Channel, a passageway quite unknown, or at least, announced prior to 1835, at which time the first United States survey was made. Immediately south of it lies the great Dry Romer Shoal, about six miles long and one and one-half miles broad, forming a natural division of the entrance waters—constant and firm both in nature and stability. South of this shoal are two channels which run at nearly right angles to each other from the bay outward, and which join together east of Sandy Hook, and by their junction create the bar channel, known as "Gedney's." In 1886 it was strongly urged, but to no avail, that the East Channel be made the steamship channel (*see heavy line in map*). It was argued that the Main Ship Channel was five miles longer than the East Channel, and that its five courses had to be steered through three distinct sets of current forces, as against two





## NEWARK BAY AND SURROUNDINGS.

SHOWING DEPTH OF WATER AS PER U. S. GOVERNMENT LATEST SURVEY [See Chart page 10].



SET OF FLOOD TIDE IN NEWARK BAY—[See Page 12].

**C**OMMERCIALLY speaking this bay is of vast importance to the City of Newark and towns on the Passaic and Hackensack rivers, and its channel has continually improved to keep up with the demand. That portion of the channel (about 1½ miles long) which lies to the east of Elizabethtown, N. J., and at the mouth of Newark Bay, originally had a depth of only 9½ feet at mean low water, while the remainder, ly-

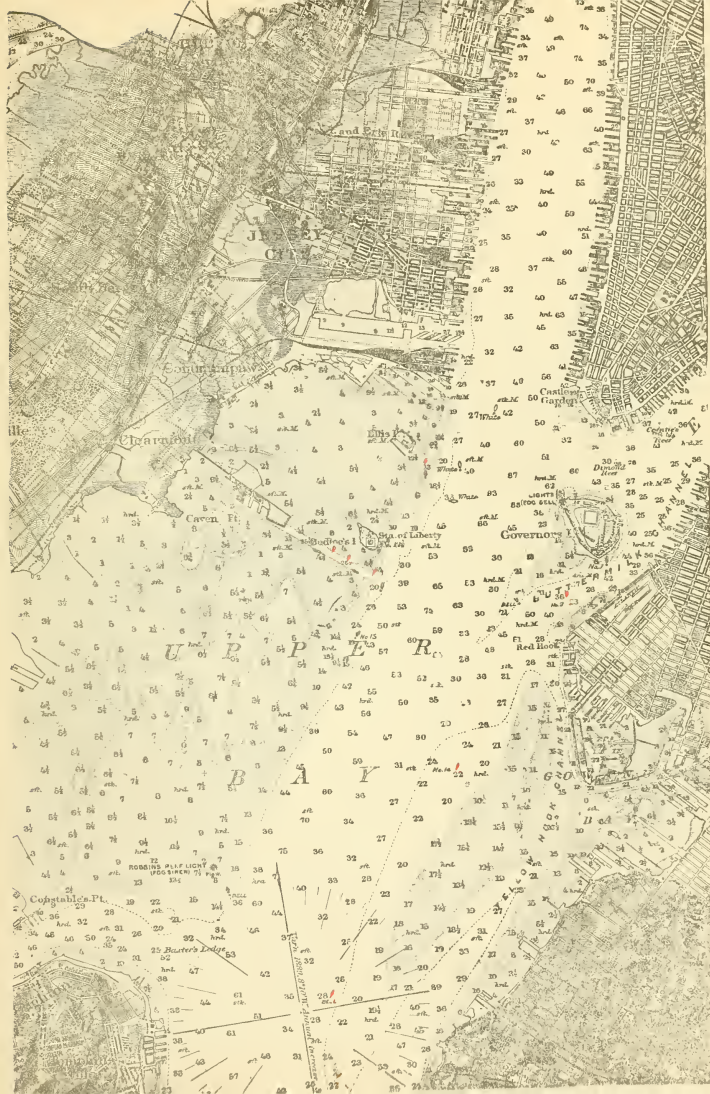
ing between Staten Island and New Jersey, had a depth of from 14 to 40 feet. Up to June 30th, 1894, a short dike was constructed and a channel dredged throughout the entire extent of the improvement, 13 feet deep at mean low water, with width varying from 300 to 350 feet. For 3000 feet in the vicinity of the bend at the Stake Light the width had been increased to 400 feet, with low water depths of from 13 to 14 feet. Up to May 1st, 1895, the channel at the turn around the Corner Stake Light and westward for a total linear distance of 1,500 feet was restored to the full width of the project of 1890—400 feet; eastward for a distance of 1,100 feet, a width varying from 250 to 300 feet was secured; an average increase in channel width of 165 feet along the entire linear distance of 2,600 feet dredged throughout to the full depth of the project 14 feet mean low water. The channel at this locality being unprotected from the drift, across the shoal flats of Newark bay forming its northerly bank, will require frequent dredging to maintain a width sufficient for the traffic constantly passing in either direction. Up to June 7th, 1895, the channel between the bridge of the Central Railroad of New Jersey was opened to the full width of 200 feet for a linear distance of 2,700 feet, and a depth of more than 10 feet at mean low water. Under the present condition of the improvement, 9.2 feet at mean low water is the greatest depth that can be carried over a shoal in Newark Bay, about 1,500 feet in extent and situated one mile below the Passaic Light. Under the present condition of the improvements vessels drawing six feet of water can at mean low water stage reach the wharves at Passaic City, the head of navigation, distant eight miles above the Centre Street Bridge, Newark. Bridge-building franchises are granted with the understanding that such structures are for the purpose of facilitating land traffic, but not to impede navigation. By a clause in the River and Harbor Appropriation act of 1882, it is provided that where any obstruction to navigation exists in or over any navigable waters of the United States, the Secretary of War may make such reasonable regulations as he may think fit to clear away the obstruction. It provides for the unobstructed passage not only for steamers and sailing vessels, but even for rafts. Railroad draw-bridges over such important navigable waterways as Harlem River and Newark Bay should be of the most modern design and made to be opened and

## NEWARK

Scale of Miles. The measurements are given in feet, and these are reduced to  
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Key to the colors used in the map:  
Black for the city of Newark.  
Blue for the water of the Hudson River.  
Red for the railroad tracks.  
Green for the parks and other open spaces.  
Brown for the hills and other elevated land.





closed in the shortest possible time. The Central Railroad of New Jersey's bridge over Newark Bay, while its present draw is an improvement over the former antiquated structure, it is inadequate for the demands of the travelling public. The flood tide as shown in diagram (on page 9), forms an oblique course toward the bridge, and it is quite necessary when a steamer (especially if it has a stern) is bound up the bay, that the draw be opened quickly to avoid accident. It is more difficult and hazardous for sailing vessels to pass through the draw, and this causes much longer detention of frames. At Elizabethport the mean rise and fall of tide is 2½ feet; maximum, 3 feet; minimum, 1½ feet. In Newark Bay the mean rise and fall of tide is 4½ feet; maximum, 5½ feet; minimum, 4 feet.

On Feb. 11th, 1809, Robert Fulton took out his first patent for inventions in navigation by steam, and on February 9th, 1811, he obtained a second patent for some requisite improvements in his boats and machinery. The same year he also made known his plan for 'River Ferry Steamboats.' Many difficulties were then connected with the ferries too and from New York City as well as elsewhere. Passengers were usually transported in open boats or barges, vehicles, horses and other freight in open lighters. When Fulton's plans became known a company was formed to establish a steam ferry from Cortlandt Street, New York, to Paulus Hook (now Jersey City). In that year and in 1812, two steam boats, the York and Jersey—were built, under Robert Fulton's supervision, for crossing the Hudson and soon after one of the same description for the East River. They were called "twin boats," there being two complete hulls mated. They were sharp at both ends, so as they could cross and return without turning. In speaking of these steamers, Fulton said: "The present boat crosses the river, which is a mile and a half broad, in fifteen minutes; the average time is twenty minutes. She has had on her at one time eight four-wheel carriages, twenty-five horses and 100 passengers, and could have taken yet more." The credit of running the first steam ferryboat in the world doubtless belongs to John Stevens, of Hoboken, N. J., but having won the credit, he seems to have abandoned the permanent use of steam, and to have returned, after a short period, to the old fashioned horse-boat. On the trial trip of the *Nassau*, the first steam ferryboat too, and from Brooklyn, the engineer became caught in the machinery and was killed.

Towing with steamboats began on the Hudson River with the opening of the Erie Canal (1825), and the *Henry Eckford* was the first steam craft to make a special business of towing barges in the North River. She laid her boiler at the foot of Liberty Street in 1830. The first regular towboat engaged in harbor towing was the *Ruben W. King*, built in 1828 by the New York Dry Dock Co., between 11th and 12th Streets, East River, New York. She was legislated into existence, as the company could not obtain a charter for their scheme to repair vessels on railways unless they provided a tug to tow all boats that might need repairing to their place. This towboat was thought then to be so far up-to-date as to be useless for the needs of shipping wharves; the advent of a steam tug, and the suddenly manifested by the Government in those times for American Shipping in so marked contrast to the disregard shown at the present time. The *King* was an ugly looking boat. She had a square stern like a North River schooner and a bow as round as the full moon. Her keel was square at one end, and she had very little deck-board. Length at hull, 68 feet; beam, 22 feet; depth at hull, 22 feet. The keelboards were very far forward and the boiler was aft of the engine, the latter being in the "steeple" pattern, a type now nearly extinct.

The present *Henrietta Hamilton* was launched at Wm. A. Brown's shipyard lot at 10th Street (now 11th), New York, in 1830 and was at that time the largest steamboat afloat. Her dimensions were: length 107 feet; breadth over all, 68 feet; depth at load, 13 feet. At the same yard the celebrated channel steamer was built for the Charleston Steamship Line, which was established in 1841 by Spaulding, Foster & Co. Her engines were from the Navy Works, then managed by G. H. Halsey, Allen & Co.

## EAST RIVER ENTRANCE TO NEW YORK HARBOR.

**SOUNDINGS**—The soundings are expressed in fathoms except on the dotted surfaces, where they are given in feet. The figures show the depths at mean low water.

**BUOYS**—Red buoy to be left in entering on Starboard hand.  
Black buoy to be left in entering on Port hand.  
Black and Red horizontal stripes—Danger Buoy.  
Black and White perpendicular stripes—Channel Buoys.  
C. N. or S. signifies Can, Nun, or Spar.



EAST RIVER AND LONG ISLAND SOUND FROM PORT MORRIS TO GREAT NECK.

**T**HIS entrance to New York Harbor is destined to become of great importance to the Metropolis. The channel originally had many obstructions to navigation, especially at Hell Gate. But a large number of these obstacles have been removed, and up to the first of May, 1894, the water projection of Hallett's Point, covering three acres, had been removed to a depth of 26-feet, as were also Ways Reef, Shell Drake, Scaly Rock and Diamond Reef, off Governor's Island, to the same depth. Pilgrim Rock and Ferry Reef had been reduced to a least depth of 24-feet; Heel Top had been dredged to 20.5-feet; and the least depths on Frying Pan and Pot Rock were 18-feet and 22.8-feet at mean low water, respectively; Flood Rock and connecting reefs, covering nine acres, had



from fifteen to 40 feet. The least depth over Flood Rock, Hen and Chickens, and Gridiron was 25 feet at mean low water, and that in the channel between Flood Rock and the Mill Rocks was 18 feet mean low water. The reef at Sunken Meadow, which originally had only 11 feet over it, had been lowered to 14 feet mean low water, over the main reef, and to 18 feet mean low water, on the southern part. There are still some dangerous obstructions in East River that should be removed among them the line of reefs to the southward and westward from Blackwell's Island—the Man-of-War rock, opposite 18th Street, being one of them. Middle Ground, near the southern entrance to Little Hell Gate, between Sunken Meadow and Lawrence Point, has a channel on either side of it barely 150 feet wide, and others.

It has been an erroneous supposition with many that Long Island Sound begins at Sand's Point, while those well informed on the subject claim that the terminus of the strait known as the East River, should be designated by a line drawn from Willet's Point to the southeast extremity of Throgg's Neck (see map).

East Chester Creek—sometimes called Hutchinson River—varies in width from 25 feet to half a mile, at high water, and empties into East Chester Bay, which is twenty miles by water from the Battery. Mean rise of tide at the mouth of the Creek is 7.1 feet. Three draw bridges cross this stream. About 13 miles from its mouth is Town Dock, the principal landing. The main business part of the City of Mount Vernon is about two miles from Town Dock. From Long Island Sound to a point 500 feet above Lockwood's Cove is a channel of nine feet in depth at mean high water and two feet at mean low water. The width of the channel is 100 feet, except between Town Dock and Lockwood's, a distance of about half a mile. Little Neck Bay—mean rise and fall of tide 7.7 feet, max. 8.0 feet; min. 6 feet.

Flushing Bay, fourteen miles from the Battery, is a broad shallow body of water from one to two miles wide and has a soft mud bottom which is nearly level. The mean rise of tide is 7.1 feet. The channel is 160 feet wide and about 6 feet deep at mean low water. In 1894 the arrival and departure of vessels were 375 steamers, 200 sailing vessels and 60 barges.

## DISTANCES AND BEARINGS.

	MILES.	BEARINGS.
Ruler's Island Light to Whitestone . . . . .	34	E. 1 S.
Whitestone Light to Fort Schuyler Light Buoy . . . .	12	E. 1 S.
Fort Schuyler Light (Buoy) to Stepping Stones Light .	12	N. E. 1 N.
Stepping Stones Light to Execution Rocks Light . . .	30	N. E. 1 N.
Stepping Stones Light to Throgg's Neck Light . . . .	12	S. W. 1 S.
Throgg's Neck Light to North Brothers' Light . . . .	5	W. 1 N.
Execution Rocks Light to Sand's Point Light . . . .	7	S. by E. 1 E.
Execution Rocks Light to Great Captain's Island Light .	81	N. E. 1 E.
Execution Rocks Light to Fitts's Neck Light . . . .	16	E. 1 N.

ON November 17th, 1889, the British frigate *Hesper*, one of England's noblest ships, struck the rock, wrecked opposite the upper extremity of Randall's Island, and sank with all on board except her mate. She had in with her, being about 85,000,000 in gold coin. This unfortunate vessel was never found, and she lay for years on the bottom.

The steamer *Norfolk* was built in 1870 and made her first trip from New York to Albany on June 22, 1881, passing 17,000 to 20,000 tons the first steamer to use it for coal. This was the commencement of a long and profitable career.

In 1877 there were twenty-four ships plying between the ports of New York and Liverpool. The average time of these vessels was 22 days eastward and 23 days westward.

# LONG ISLAND SOUND

## FROM GREAT NECK TO MATINICOCK POINT.

**SOUNDINGS.**—The soundings are expressed in fathoms except on the dotted surfaces, where they are given in feet. The figures show the depths at mean low water.

**BUOYS.**—Red buoy to be left in entering on Starboard hand.

Black buoy to be left in entering on Port hand.

Black and Red horizontal stripes—Danger buoy.

Black and White perpendicular stripes—Channel buoy.

C. N., or S. signifies Can. Nun or Spar.



### MANHASSET BAY

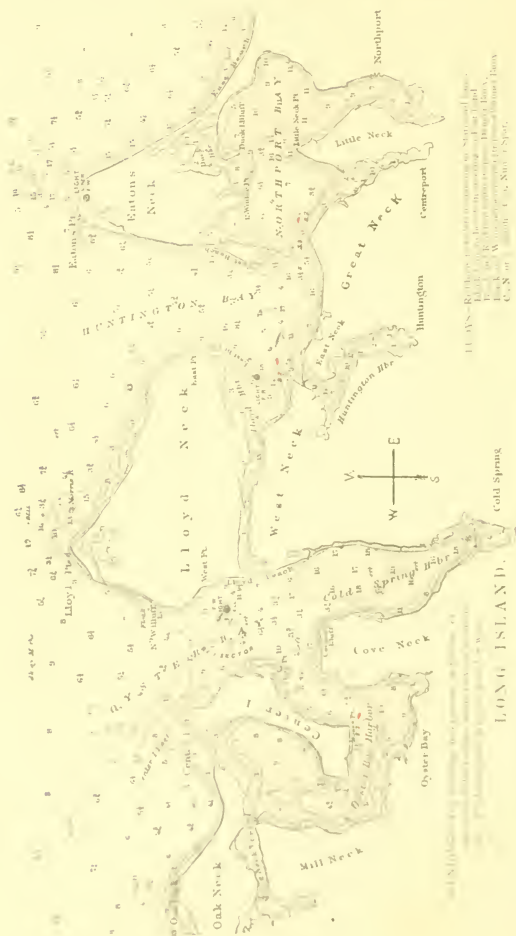
(Cow Bay), Mean rise and fall of tide 7.7 feet; max., 8.9 feet; minimum, 6.4 feet.

Hemstead Harbor—Mean rise and fall of tide, 7.7 feet; max., 8.9 feet; min., 6.4 feet.

### DISTANCES ON LONG ISLAND SOUND FROM THE BATTERY.

MILES.			MILES			MILES,		
College Point . . . . .	11		Greenwich . . . . .	30		Shelter Island . . . . .	130	
Flushing . . . . .	12		Roslyn . . . . .	30		Norwich . . . . .	133	
Whitestone . . . . .	13		Stamford . . . . .	35		Sag Harbor . . . . .	140	
Throgg's Neck . . . . .	16		Eaton's Neck . . . . .	38		New London . . . . .	120	
Great Neck . . . . .	18		Huntington . . . . .	40		Block Island . . . . .	150	
City Island . . . . .	19		Wilson Point . . . . .	40		Hartford . . . . .	158	
Glen Island . . . . .	22		South Norwalk . . . . .	42		Newport . . . . .	165	
Sand's Point . . . . .	22		Port Jefferson . . . . .	65		Fall River . . . . .	170	
Glen Cove . . . . .	23		Bridgeport . . . . .	65		Providence . . . . .	180	
New Rochelle . . . . .	23		New Haven . . . . .	76		New Bedford . . . . .	187	
Mamaroneck . . . . .	24		Saybrook Point . . . . .	100		Boston . . . . .	250	
Port Chester . . . . .	27		Stonington . . . . .	120		Portland, Me. . . . .	325	
Captain's Island . . . . .	28		Greenport . . . . .	125				

## LONG ISLAND SOUND, FROM OAK NECK TO EATON'S NECK.



LONG ISLAND SOUND, FROM OAK NECK TO EATON'S NECK.  
 This map was prepared by the U.S. Coast and Geodetic Survey, under the direction of the Chief of the Survey, and is published by the U.S. Government Printing Office, Washington, D.C., 1884.

Oyster Bay—Mean rise and fall of tide, 7.3 feet; minimum, 8.6 feet; maximum, 6 feet.

Hudson Bay—This bay, which is forty miles from the Battery, New York, is a well known harbor of refuge. It has an available depth of nearly eight feet at mean low water up to within three-fourths of a mile of the land at the harbor, where the low water depth gradually shoals to zero. Up to July 1st, 1894, the eight-foot channel had been dredged 105 feet wide to the bend at the low water landings, with width of 185 feet at the bend, and thence to the upper landing 91 feet wide. The mean rise of tide is 7.2 feet. Eaton's Point Light is four miles from the harbor.

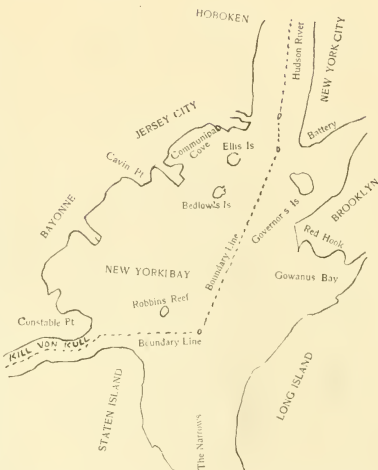
Northport Bay—Mean rise and fall of tide is 7.3 feet; minimum, 8.6 feet; maximum, 6 feet.



## THE BOUNDARY LINE BETWEEN NEW YORK AND NEW JERSEY.

THE accompanying diagram shows the boundary line between New York and New Jersey lands under water, from Romer Beacon, in Raritan Bay, to Hastings and Piermont on the Hudson River.

Before the Joint Boundary Commission located this line on October 12th, 1887, there were many disputes—in cases attended by bloodshed—among oyster planters, dredgers and others. The Raritan Bay boundary was determined by a series of straight lines, based upon compromises of the commercial interests of both states concerned, and proved a just and satisfactory division, but great difficulty was experienced in agreeing upon the line through New York Bay. The Boundary in the Arthur Kill or Staten Island Sound and the Kill Von Kull was also rather difficult of adjustment, on account, as was the case in New York Bay, of the presence of certain islands which cropped up in the way. The New York Commissioners were very reluctant to let Bedloe's or Liberty and Ellis Islands go over to the Jersey side of the line through the bay, but were bound hand and foot by a decision of the New York Court of Appeals, which, interpreting the treaty of 1834 between New Jersey and New York concerning the lands under water question, declared that the phrase "the middle of the water," which appeared in the treaty meant the centre or thread of the channel. However, New York held its own in Arthur Kill, Kill Von Kull and the Hudson River. The boundary in Arthur Kill is laid down to the west of Pratt's Island, which leaves that picturesque bit of land in New York waters, and the line through Newark Bay and Kill Von Kull to the upper bay runs past the Corner Stake Lighthouse and Shooter's Island in such a way as also to bring them within New York's jurisdiction.



Sandy Hook to Sandy Hook Lightship,  $6\frac{1}{2}$  miles. Sandy Hook Lightship to Fire Island, thirty miles. Sandy Hook Lightship to Shinicock, 67 miles.

The Erie Canal was opened to navigation in the Autumn of 1825, to the great rejoicings of the citizens of New York.

The first steamer to dare the storm of ocean was the *Phoenix*, built by Col. John Stevens, of Hoboken, in 1807. She went from New York to Philadelphia, Pa.

In 1854 the Pacific Mail S. S. Line employed a fleet of twelve first-class steamers; the Atlantic and Pacific line, five; Roberts California line, three; there were five coastwise lines, embracing thirteen vessels; at the same period there were also eleven foreign lines with fifty-five vessels, running from New York City.

## FERRIES FROM NEW YORK CITY TO BROOKLYN, JERSEY CITY AND STATEN ISLAND.

### NORTH RIVER.

**HOBOKEN**—From Barclay St. to Newark St., Hoboken. Also from Christopher St. to Newark St., Hoboken. Depot of the Del., Lack. & Western R. R. A line of street cars runs from Christopher to across town to East 23rd St. Ferry.

**FOURTEENTH ST. FERRY**—From West 14th St. to 14th St. Hoboken.

**DESBROSSES ST. FERRY**—Pennsylvania R. R.; New York, Susquehanna and Wilkes-Barre and Eastern Railroads; Lehigh Valley R.R. A line of street cars runs from foot of Liberty St. to across town to Grand St. Ferries.

**LIBERTY ST. FERRY**, to Communipaw—Central R. R. of New Jersey Depot; Royal Blue Line, N. Y., Philadelphia, Baltimore and Washington; Long Branch R. R.; Freehold and Atlantic Highlands R. R.; Allentown Line; N. Y. and Newark R. R.

**CORTLANDT ST. FERRY**—Pennsylvania R. R.; New Jersey, Susquehanna and Western and Wilkes-Barre and Eastern Railroads; Lehigh Valley R.R. A line of street cars runs from foot of Liberty St. to across town to Grand St. ferries.

**PAVONIA FERRY**—From Chambers St. to Pavonia Avenue, Jersey City. Depot of New York, Lake Erie, and Western R. R.; New Jersey and New York R. R.; Northern of New Jersey R. R.; New York and Greenwood Lake R. R. A line of street cars runs from foot of Chambers Street to E. 23rd Street Ferry. A line of cars also runs to Roosevelt Street Ferry, E. R.

**FERRY FROM WEST 13th ST.**—To Bay St., Jersey City. A line of street cars runs from foot of W. 23rd Street to E. 23rd Street Ferry.

**WEST 23rd STREET FERRY**—To Pavonia Avenue, Jersey City. Soon as ferryboats now under construction are completed, there will be a line from 23rd Street to Pennsylvania R. R. Depot, Jersey City.

**FORTY-SECOND STREET FERRY**—From W. 42nd Street to Weehawken. Depot of N. Y., Ont. and W. R. R. West Shore. A line of street cars runs from W. 42nd St. to East 34th St. Ferry.

**WEST SHORE FERRY**—From foot of Franklin St. to Weehawken. Depot of N. Y., O. and W. R. R., West Shore.

**FORT LEE FERRY**—From West 13th Street and W. 13th Streets.

### ANNEX FERRIES.

From N. Y., Lake Erie and W. R. R. at Pavonia Ferry, to Central R. R. of New Jersey, thence to Fulton Street, Brooklyn.

From Penn. R. R. Depot, Jersey City, to Fulton St. Brooklyn.

### EAST RIVER.

**BEDLOE'S ISLAND**—From the Battery.

**STATEN ISLAND FERRY**—Whitehall Street to St. George.

**ELLIS ISLAND**—From Whitehall Street.

**GOVERNOR'S ISLAND**—From Whitehall Street.

**SOUTH BROOKLYN FERRY**—From Pier 2 to 39th Street, S. Brooklyn.

**HAMILTON FERRY**—Whitehall Street to Hamilton Avenue, Brooklyn.

**SOUTH FERRY**—Whitehall Street to Atlantic Avenue, Brooklyn.

**WALL STREET FERRY**—Wall Street to Montague Street, Brooklyn.

**FULTON FERRY**—Fulton Street to Fulton Street, Brooklyn. A line of street cars runs from foot of Fulton Street, New York, to W. 23rd Street Ferry and one to Cortlandt Street.

**ROOSEVELT STREET FERRY**—From Roosevelt Street to Broadway, Williamsburg. A line of street cars runs from foot of Roosevelt Street to Pavonia Ferry, N. R.

**CATHERINE STREET FERRY**—From Catherine Slip to Main Street, Brooklyn.

**GRAND STREET FERRY**—From Grand Street to Grand Street and Broadway, Williamsburg. A line of street cars runs from foot Grand Street, New York to Desbrosses Street Ferry and one to Cortlandt Street Ferry.

**GREENPOINT FERRY**—From E. 10th and 23rd Streets to Greenpoint Avenue, Williamsburg.

**HOUSTON STREET FERRY**—From Houston Street to Grand Street, Williamsburg.

**TWENTY-THIRD STREET FERRY**—23rd Street to Broadway, Williamsburg. A line of street cars runs to Pavonia Ferry and one to W. 23rd St. Ferry.

**LONG ISLAND CITY**—(L. I. R. R.) From James' Slip to Hunter's Point.

**HUNTER'S POINT FERRY**—From E. 7th Street and E. 14th Street. A line of cars runs to W. 42nd Street Ferry.

**WARD'S ISLAND**—From E. 26th Street and E. 115th Street.

**ASTORIA FERRY**—From E. 92nd Street.

**BLACKWELL'S ISLAND**—From E. 26th Street. E. 52nd and E. 70th Streets.

**COLLEGE POINT**—From E. 69th Street.

**HART'S ISLAND**—From E. 26th Street.

**RANDALL'S ISLAND**—From E. 26th Street and E. 124th Street.

## STEAMSHIP ROUTES.

## NEW YORK TO LIVERPOOL.

			NORTH TRACK.		SOUTH TRACK.	
			Total Distance from New York		Total Distance from New York	
			Miles.	Miles.	Miles.	Miles.
New York	-	to Sandy Hook	15½	15½	15½	15½
Sandy Hook	-	" Sandy Hook Lightship	6½	22	6½	22
Sand Hook Lightship	-	" Fire Island	30	52	30	52
Fire Island	-	" The Fastnet	2,726	2,778	2,813	2,865
The Fastnet	-	" The Old Head of Kinsale	42	2,820	42	2,907
The Old Head of Kinsale	-	" Queenstown (Roche's Point)	16	2,836	16	2,923
Queenstown (Roche's Point)	-	" Ballycotton	11	2,847	11	2,934
Ballycotton	-	" Conningbeg Lightship	50½	2,897½	50½	2,984½
Conningbeg Lightship	-	" Tuskar	19	2,916½	19	3,003½
Tuskar	-	" Skerries	94	3,010½	94	3,097½
Skerries	-	" Bar Lightship	50	3,060½	50	3,147½
Bar Lightship	-	" Liverpool (Rock Light)	11	3,071½	11	3,158½

## NEW YORK AND VARIOUS POINTS.

New York	-	to Fire Island	52	52	52	52
Fire Island	-	" { Bishop's Rock Lighthouse (Scilly Isles, off Cornwall, W) }	2,860	2,912	2,939	2,991
Bishop's Rock Lighthouse	-	" Falmouth	67	2,979	67	3,058
" " "	-	" Plymouth	95	3,008	96	3,087
" " "	-	" Needles (Isle of Wight)	194	3,106	194	3,185
" " "	-	" Southampton	215	3,127	215	3,206
" " "	-	" Cowes, (Isle of Wight)	228	3,120	208	3,199
" " "	-	" Havre	255	3,167	255	3,246
New York	-	" Milford Haven		2,958		3,041
"	-	" Liverpool		3,071½		3,158½

## BOSTON TO LIVERPOOL.

Boston	-	to Boston Outer Light	8½	8½	8½	8½
Boston Outer Light	-	" Fastnet	2,588	2,596½	2,684	2,692½
Fastnet	-	" Queenstown (Roche's Point)	58	2,654½	58	2,750½
Queenstown (Roche's Point)	-	" Liverpool (Rock Light)	235½	2,890	235½	2,986

In 1812 a plan to propel vessels without steam was projected in New York, to completely overturn the act of the legislature granted to Fulton, who was greatly annoyed at first over the new device, which was nothing less than to propel the vessel by springs and pendulum. The boat, the wheels of which revolved with great rapidity when on the stocks, stood motionless when she was in the water.

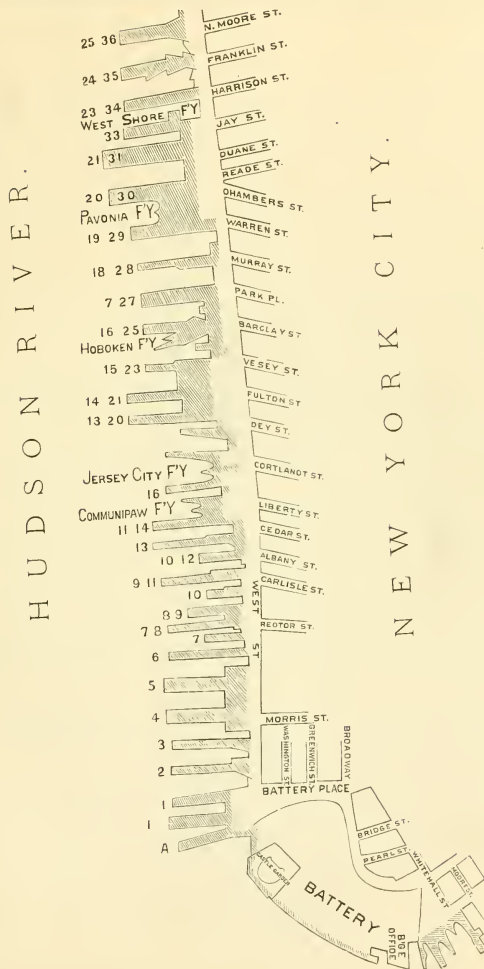
The Brooklyn Ferry was established in the early colonial days and consisted of a flat boat worked by sweeps.

Elias Desbrosses, from whom Desbrosses Street, New York City, derived its name, was alderman of the "East Ward" in 1767.

Peace with Great Britain was proclaimed by Congress in April, 1783, and the City of New York was evacuated by the hostile forces on Nov. 26th, following.

The first packet to run between New York and Staten Island was in 1755.





WATER FRONT DIRECTORY—*Continued,*

From N. Moore to Gansevoort Street.

## PIERS.

Number.	Use.
26	Old Dominion Steamship Co. for Old Point Comfort, Norfolk, Portsmouth, Pinner's Point, Newport News, Petersburg and Richmond, Va.
27	Pennsylvania Railroad—Empire Line and Union Line, freight.
28	
29	
30	Albany Day Line steamers: Mary Powell for Rondout.
	DESBROSSES STREET FERRY to Jersey City—Pennsylvania Railroad Depot.
32	Norwich Line for Boston.
33	Peoples' (night) Line for Albany: Albany Potatoe Market.
42	General Merchandise.
34	Ocean Steamship Co., (Savannah Line).
35	
36	Providence and Stonnington S. S. Co., Baxter Wrecking Co., office, 308 West Street.
37	Southern Pacific Steamship Co., (Morgan Line).
38	White Star Steamship Line, (cargo and live stock steamers).
39	National Steamship Line.
40	Cunard Steamship Co., Vernon H. Brown & Co., Agents, 4 Bowling Green.
41	Delaware, Lackawanna and Western Railroad Co. (freight station). S. Ransom, steam fitter, 357 West Street.
	Entrance to uncompleted Hudson River Tunnel.
42	Campagne General Trans-Atlantique Steamship Line to Havre: A. F. Forget, Ag't, 3 Bowling Green.
43	Catskill Line: Saugerties Line.
	CHRISTOPHER STREET FERRY to Hoboken—Delaware, Lackawanna and Western R. R. Depot.
44	White Star Steamship Line (passengers and freight).
45	
46	Kingston Steamboat Line: Citizens' (Troy Line steamboats): Nyack Steamboat Line. Vierow's Towing Line.
47	Quebec Steamship Line, Bermuda and West Indies: A. E. Outerbridge & Co., Agents, 39 Broadway.
FOOT.—At Pier 42, extensive work in great preparations are being made for building six new piers between Charles and Catherine Streets, extending to West 47th Street, for use for steamship piers. In consequence, the following present occupants between Charles and Catherine Streets will be obliged to vacate at their turn.	

## OYSTER MARKET.

W 4th Street—Clark and Wilkins, wood; Van Tassel's grain elevator; Knickerbocker Ice Co.  
 Bank Street—David S. Brown & Co., Satin Glass Soap; M. J. & M. Blake, iron and steel scraps  
 Bethune Street—Cornell Steamboat Co.; Ridgewood Ice Co.

Between Bethune and W 12th Street—H. P. Campbell & Co.

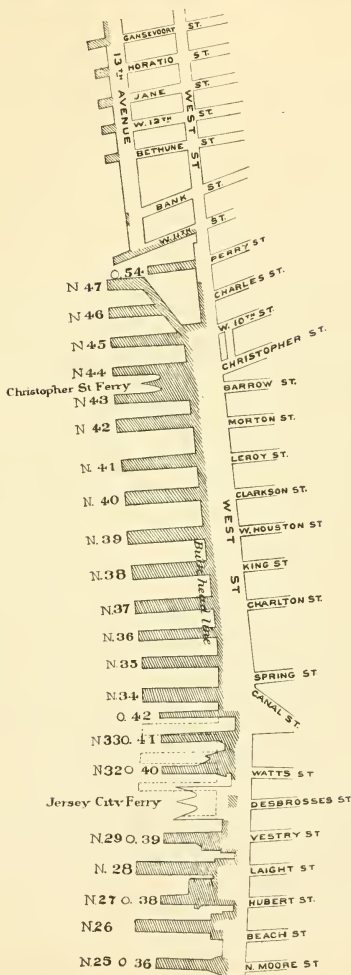
W 12th and Jane Streets—Bonded and Free Stores.

Jane Street—Morton's Peekskill Passenger and Freight Line, Farrytown Passenger and Freight Line, steamers for Long Branch, Elberon, Pleasure Bay.

Harbor Street—National Ice Co.

Gansevoort Street—Pier 56, old No 3—Lehigh Valley R. R., freight only.

HUDSON RIVER.



NEW YORK CITY.

WATER-FRONT DIRECTORY—*Continued.*

## From Gansevoort to 35th Street.

Between Gansevoort and Bloomfield Streets—

West Washington Market; Quartermaster's Department; steamer Magenta for Keyport, passenger and freight.  
Bloomfield Street—Fireboat New Yorker.

Between Bloomfield and Little 12th Streets—Pier 59, old No. 1—Cedar Hill Ice Co.

W. 13th Street—FERRY TO BAY STREET, Jersey City.

Steamer for Fort Lee, Pleasant Valley, Edgewater and Shady Side (freight only); Colyer Printing Co. (Delamater's old Works).

W. 14th Street—R. J. Dean and Co., U. S. Bonded Warehouse.

FOURTEENTH STREET FERRY to Hoboken.

W. 15th Street—Central R. R. of New Jersey (freight only); Peiper Fast Freight Line for Harrisburg, Va.

W. 16th Street—Hudson Plasterboard Co.

W. 17th Street—Baltimore and Ohio R. R. (Continental Line), freight only. Gas Works.

Between 17th and 18th Streets—Gas Works; General Merchandise.

W. 18th Street—General Merchandise.

Between 18th and 19th Streets—D. C. Newall's Saw Mill.

Between 19th and 20th Streets—M. J. Northrup, lumber inspector.

W. 20th Street—Knickerbocker Ice Co.'s shipyard; general merchandise pier.

Between 20th and 21st Streets—Knickerbocker Ice Co.

W. 21st Street Pier—Allan-State Steamship Line, Austin, Baldwin & Co., agents, 53 Broadway.

Between 21st and 22d Streets—John McClave, hardwood lumber; John McClave & Sons, mfg. Colonial Bicycles; Union Ice Co.; E. H. Ogden & Co., lumber.

W. 22d Street Pier—Albany Day Line and steamer Chrystenah stop here; Rockaway and Coney Island steamers leave here.

W. 23d Street—PAVONIA FERRY to Jersey City.

PENNSYLVANIA R. R. FERRY (new line to begin in near future).

Pier 54—W. 24th Street—Anchor Steamship Co., New York and Glasgow; Henderson Bros., agents, 7 Bowling Green.

Pier 55—W. 25th Street—Atlas Mail Steamship Line to West Indies; Pim, Forward & Kellock, agents, 24 State Street; Westervliet Ice Co.

Between 25th and 26th Streets—Ichabod T. Williams, mahogany, pine and hardwood.

Pier 56—W. 26th Street—Arrow Steamship Line to Leith, Scotland. Bristol City Steamship Line to Bristol.  
Between 26th and 27th Streets—Cornell Iron Works.

Pier 57—Between 27th and 28th Streets—Columbian Steamship Line (Panama R. R. Co.) Central Stores.

Pier 58—28th Street—Delaware, Lackawanna & Western R. R. Co.; The Starin Transportation Line (freight).

Pier 59—W. 29th Street—Atlantic Transport Line for London. New York Shipping Co., agents, 4 Broadway.

Pier 60—W. 30th Street—Stokes & Theford's coal elevators and lumber yard.

Pier 61—W. 31st Street—N. Y. Central and Hudson River Railroad (freight).

Pier 62—W. 32d Street—“ “ “ “

Pier 63—W. 33d Street—“ “ “ “

W. 34th Street Pier—Tripp's grain elevator; general merchandise; steamer Al. Foster for Fishing Banks.  
Between 34th and 35th Streets—Merchants' Union Ice Co.; Manhattan Market.

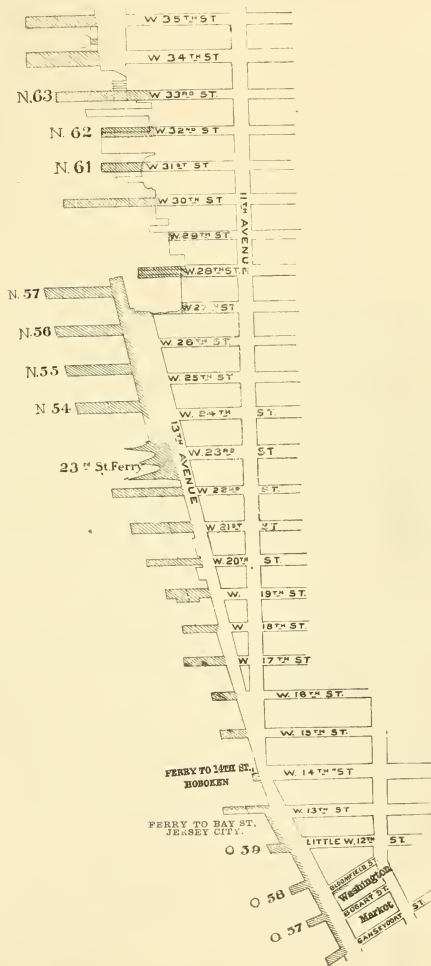
W. 35th Street Pier—Rogers & Curran, coal.

Between 35th and 36th Streets—New York, Ontario & Western R. R. float—ship freight only.



HUDSON RIVER.

NEW YORK CITY.



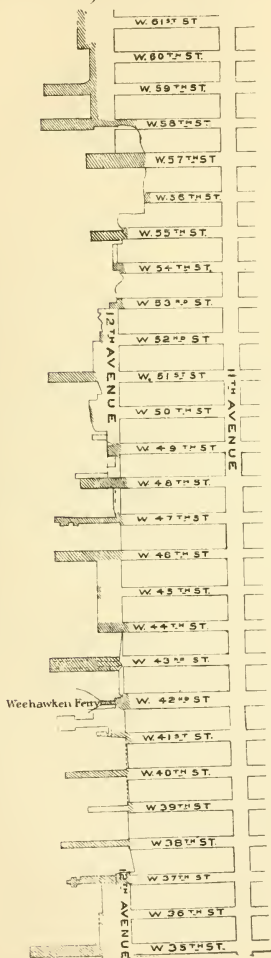
WATER-FRONT DIRECTORY—*Continued.*

From W. 36th to W. 86th Streets.

- W. 36th Street—New York, Ontario and Western Railroad slips (freight only).  
 W. 37th Street (Pier 67)—Pennsylvania Railroad (freight station).  
     Between 37th and 38th Streets—New York, Susquehanna and Western Railroad (freight only).  
 W. 38th Street Pier—Marble shipped from here; North River Stock Yards.  
 W. 39th Street—General merchandise.  
 W. 40th Street Pier—Citizen's Coal Co.; slaughter houses; general merchandise.  
 W. 41st Street—Consolidated Gas Co.  
 W. 42d Street—FERRY TO WEEHAWKEN.—Horse cars to E. 34th, Grand and Houston Street ferries.  
 W. 43d Street Pier—Knickerbocker Ice Co.; general merchandise. Bulkhead—E. S. Higgins & Co., carpet manufactory.  
 W. 43d and 44th Streets—Consolidated Gas Co.  
 W. 45th Street—Consolidated Gas Company.  
 W. 46th Street Pier—Robert Gordon's coal yard.  
 W. 47th Street Pier—D. Grieme's coal pockets; general merchandise.  
 W. 48th Street Pier—General merchandise; H. E. Stevens & Son, lumber.  
 W. 49th Street Pier—General merchandise.  
 W. 50th Street Pier—“ “  
 W. 51st Street Pier—“ “  
 W. 52d Street Pier—Brick Market.  
 W. 53d Street Pier—General merchandise.  
     Between 54th and 55th Streets—Stokes & Thedford's coal elevator.  
 W. 55th Street Pier—General merchandise; E. C. Clifford & Co., ice; Western Union Telegraph crossing.  
 W. 56th Street Pier—General merchandise.  
     Between 56th and 57th Streets—Crimmins Asphalt Works.  
 W. 57th Street Pier—Dock Department yards.  
 W. 58th Street Pier—Eastman's Slaughter House.  
 W. 59th Street—“ “ “ “  
 W. 60th to 72d Streets—New York Central & Hudson River Railroad, freight.  
 W. 76th to 86th Streets—Building materials.  
 W. 96th Street—Moquin, Offerman & Heissenbuttle, coal.

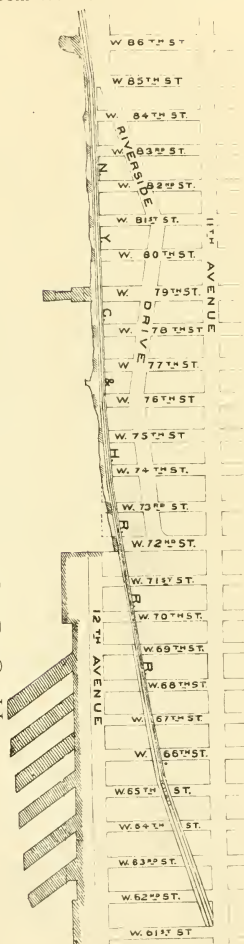
From W. 35th to 61st Streets.

HUDSON RIVER.



From W. 61st to 86th Streets.

HUDSON RIVER.



# WATER-FRONT DIRECTORY.

## PIERS.

### EAST RIVER—From Battery to Pier 39.

1011

BATTERY PARK Pier—BEDFORD'S ISLAND FERRY: Excursion steamers for Rockaway, etc., land here. Barge Office—U. S. Shipping Commissioner; Emigrant Free Labor Bureau.

ELLIS ISLAND FERRY. Bureau of Immigration; United Press Ship News office; U. S. Marine Hospital Office.

GOVERNOR'S ISLAND FERRY.—U. S. Express Co.'s branch office; Baltimore and Ohio Express.

STATEN ISLAND FERRY.—Rapid Transit R. R.

FERRY TO 65TH STREET, S. Brooklyn.

HAMILTON FERRY.—To Hamilton Avenue, South Brooklyn.

SOUTH FERRY. To Atlantic Avenue, South Brooklyn.

FERRY TO 30TH STREET, South Brooklyn.

3 Quartermaster's Department; general merchandise.

4 General Merchandise.

Between Piers 4 and 5 New York Central and H. R. R. (freight).

5 General Merchandise, Canal Boat District.

6 " " " " " "

7 " " " " " "

8 New York, Lake Erie and Western R. R. (freight).

9 Ocean sailing vessels; line to Melbourne and Sydney, Australia.

10 Campania Transatlantic Espanola Steamship Line for Havana (passengers and freight). J. M. Geballos & Co., agents, 80 Wall Street.

11 Ocean sailing vessels; general merchandise.

12 New York and Haiti Packet Line, Ebel & Co., 35 Old Slip.

13 Dearborn's Line to San Francisco, Cal.; south side—general merchandise vessels.

14 Benner's Line, sailing vessels for Key West and Tampa, N. A. Benner & Co., 10 Old Slip. Other sailing vessels.

15 Wm. P. Clyde & Co.'s West India Steamship Line for Santo Domingo, Haiti and Turk's Island WALL STREET FERRY.

16 New York and Cuba Steamship Co., J. E. Ward & Co., agents, 113 Wall Street.

17

18 Merchants' Trans. Co., Canal line, between New York and Trenton; New York and Norwich Propeller Co., freight; Perth Amboy and Elizabethport steamer Meta; Merchants' Express Trans. Co. for Newark, Sutton Line, sailing ships for Lower California.

19 Sutton's Line, sailing ships for San Francisco, Cal., south side of pier. North side of pier—Mallory Steamship Line for Texas, Galveston and Key West.

20 Mallory Steamship Line for Texas, Galveston and Key West.

21

FULTON FERRY.

22 Harlem Steamboat Line.

FULTON MARKET.

23 Norwalk Freight Line; Boyer's Flushing and College Point Freight Line.

OYSTER MARKET.

24 Hartford and New York Transportation Co., passengers and freight; Glen Cove steamers. Northport steamers.

25 Hartford Freight Line, south side; New Haven Steamboat Line, north side.

26 Montauk Steamboat Co.

27 Baltimore and Ohio R. R. Continental Line, freight.

Between piers 27 and 28 Alfred Barber's steam coal hoister, office 377 Water Street.

28 Clyde's Steamship Service.—New York, Charleston, Florida and Wilmington Lines; W. P. Clyde & Co., agents, 5 Bowling Green.

29 Clyde's Steamship Service.—New York, Charleston, Florida and Wilmington Lines; W. P. Clyde & Co., agents, 5 Bowling Green.

FERRY TO BROADWAY, Brooklyn, E. D.

Long Island Express—receiving station.

LONG ISLAND RAILROAD FERRY to Long Island City.

30 Long Island Railroad Freight Depot.

31 Clyde's Philadelphia Daily Line.

CATHARINE FERRY.

32 Unoccupied.

33 Central Vermont Railroad—Steamers for New London, freight.

34 Ocean sailing vessels; general merchandise.

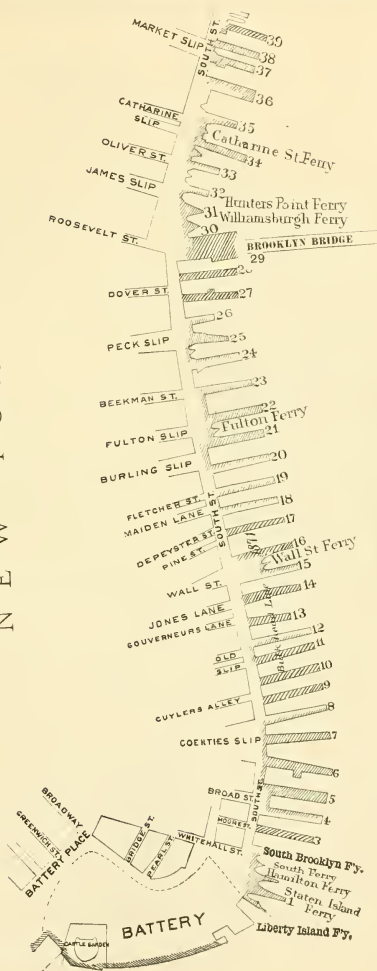
35 White Steamship Line to Newport, N. H., New Brunswick and Canada.

36 Red Hook Steamboat Line; passengers and freight.

37 Screw Dock, Episcopal Floating Chapel for seamen.

NEW YORK CITY.

EAST RIVER



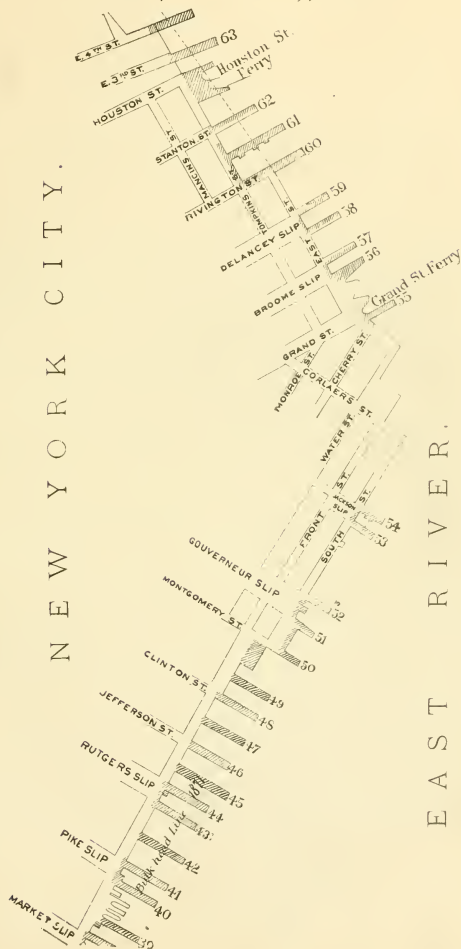
WATER-FRONT DIRECTORY—*Continued*

From Pier 41 to E. 4th Street Pier.

## PIERS.

- 40 New Bedford Steamship Line—Old Colony Steamboat Co.  
 41 North and East River Steamboat Co. for Stamford, Ct., passengers and freight. Steamer Port Chester for Oyster Bay. Steamer for Huntington, L. I., passengers and freight. Steamer Maid of Kent for Greenvale, Conn., passengers and freight. Steamer Glenville for Port Chester.  
 Sectional Docks—Baker & Williams, storage; Elliott F. Driggs & Co., storage; Greenlie, Wyatt & Co., machinists and blacksmiths; New York Floating Dry Dock and Repair Co.'s office, Pidgeon Island Co.  
 43 Market ships for Southport and Westport. steamer for Mount Vernon, freight.  
 44 General merchandise.  
 45 New York, New Haven & Hartford Railroad Co. (East Freight Line).  
 46 Between Piers 46 and 47—Huntington L. I., market ships.  
 47 General merchandise. Ocean sailing vessels.  
 Between Piers 47 and 48—Wm. Mullenberg's coal boats discharge; office, 282 South Street. Mason Supply Co., office, 284 South Street.  
 48 General merchandise.  
 Between Piers 48 and 49—W. A. Winne, Anchor Ice Co.  
 49 Cable Steamship Line to Wilmington, N. C., and Georgetown, S. C. Wm. P. Clyde & Co., Agents, 5 Bowling Green.  
 Between Piers 49 and 50—Nesmith Bros' Stores. The Treadwell & Harris Baking Co.  
 50 New York, New Haven and Hartford Railroad Freight Depot. East Freight Line for Boston and the East. Josiah May's Sons Storage.  
 51 N. Y. N. H. & H. R. R., freight. D. M. Nichol's boiler works, Greenough Island.  
 52 N. Y. N. H. & H. R. R. freight. Jas. Fregarthen Son & Co.'s dry dock. Herring Safe Works.  
 Drydock's Slag Works. John Simmons Co., iron pipe and fittings.  
 53 John W. Sullivan's Machine Works. H. D. Mould, Rockland Lake Ice.  
 CORLEMAN'S PARK.  
 Entire Building to Corleman Street—General merchandise.  
 Codriss St.—Eaton & Co.'s iron yards. Cole's warehouses—occupied by Lawrence, Son & Gerrish.  
 East Street—John Brownell's Sons Dispat. Line (sailing vessels) for San Francisco, Cal.  
 55 Grand Street—Line from Wm. E. Havemeyer.  
 GRAND STREET—EDDIES IN Grand Street and Broadway—Brooklyn, F. D.  
 Wm. N. Lefevre's carpentry. H. Hermann, bagging and lumber.  
 56 General merchandise. Danpat & Pell, Lumber.  
 57 General merchandise. CAPSULE'S STORE. H. Hermann, lumber. Burns Bros., coal hoister, office, 25 East Street. Knickerbocker Ice Co. Walter Heywood Chair Co.  
 58 General merchandise.  
 59 Firm of merchandises—Mortola & McCarthy (successors to Klats Bros.) building material.  
 FORD & SON, iron pipes. Harvey Bogard Lumber Co., office, 40 Gold Street.  
 60 Ice Storage and docks—Rockland Lake Ice Co., Hudson River Ice Co., Hencken & Co.'s coal hoister.  
 Between Stanton and Houston Streets—American Desk Manufactory. B. Keischer & Sons. Anderson Ground Ice Co. J. Payson, sheet wood.  
 HOBBS & SMITH OFFICE On Grand Street, Broadway, F. D.  
 C. L. Hudson Co., land survey. Greenleaf Maynard's Italian and American marble yard.  
 East 4th Street—Laurie's goods and shoes. A. M. L. J. & Co., lumber and timber. Rheintrank & Co., coal and wood.  
 East 5th Street Pier—General merchandise. Herschel Bros., coal and wood. Las Fagar, lumber.

From E. 4th Street to E. 39 Street.



WATER-FRONT DIRECTORY—*Continued.*

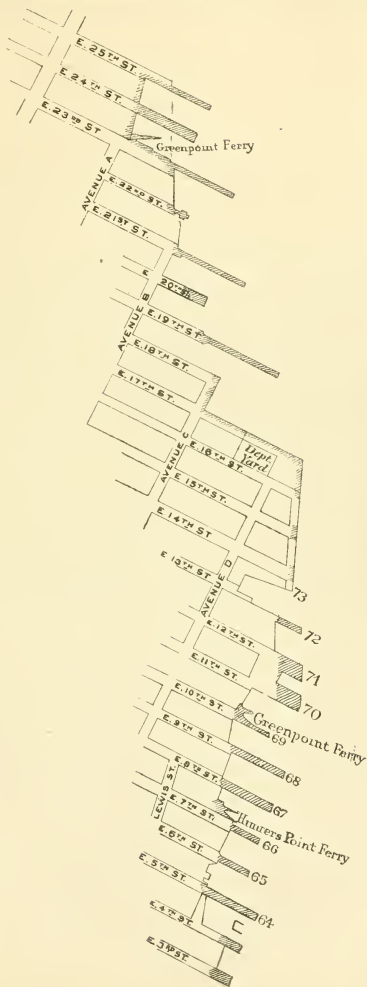
From E. 3rd Street to E. 25th Street.

- E. 5th Street—M. J. Sandpaugh's Sons, lumber and timber; John H. Monteath & Co., mahogany and rosewood; Meyer Denkes & Hoerig, coal; Constantine's storage for timber; Stuglotz's Mustard Mills.
- E. 6th Street Pier—General merchandise; E. D. Albro & Co., foreign and domestic hardwoods; Bonneau & Fleming, mahogany cabinet woods and veneers.
- E. 7th Street Pier—General merchandise; Willard Hawes & Co., timber; Constantine & Co., timber storage; Mason & Co., Ltd.; Morgan & McGovern's dry dock and ship yard.
- E. 8th Street Pier—General merchandise; Doernberg & Goodman, Metropolitan Box Factory; Willard Hawes, log yard; C. W. Dodman, coal; F. A. Mulgrew, rosewood and mahogany saw mill; Jacob Bros., piano manufacturers.
- E. 9th Street Pier—General merchandise; Morgan Iron Works; Wm. Rowland's boat works.  
EAST 10TH STREET FERRY to Greenpoint.  
Morgan Iron Works; Wm. E. Uptegrove & Co., mahogany veneers.
- E. 11th Street Pier—General merchandise; Geo. Hagemeyer & Sons, hardwood lumber; National Ice Co.; New York Mutual Gas Co.
- E. 12th Street—New York Mutual Gas Co.
- E. 13th Street—J. Rheinfrank & Co., coal and wood.
- E. 14th Street—J. Rheinfrank & Co., coal and wood; Wm. H. Schmohl, lime, cement, etc.; John P. Kane & Co., lime, cement, etc.  
Between E. 14th and 15th Streets—Consolidated Gas Co.
- E. 15th Street—Consolidated Gas Co.
- E. 16th Street—Consolidated Gas Co.; Hospital for Contagious Diseases; Willard Parker Hospital; Health Department for Disinfectants.
- E. 17th Street—Department of Street Cleaning (stable A).
- E. 18th Street Pier—General merchandise; Carroll Box & Lumber Co.; Byron W. Green, jr., second-hand building material.
- E. 19th Street—General merchandise; John J. Radley & Co., Iron Works and Foundry; Electric Fire Proofing Co., general office, Hudson and Spring streets.
- E. 20th Street—Herbert & Co., coal pockets; Consolidated Gas Co.
- E. 21st Street Pier—General merchandise; Consolidated Gas Co.
- E. 22d Street—Consolidated Gas Co.; Paul Bryant, Naphtha Renovating Works  
EAST 23D STREET FERRY to Broadway, Brooklyn, E. D.  
Clark and Allen, grain dealers; Henry B. Turner, coal and wood; Gray & Lasher, lumber and timber.  
GREENPOINT FERRY.
- E. 24th Street Pier—Department of Public Works, water meters; Wm. Campbell & Co., wall paper manufacturers and interior decorations.
- E. 25th Street Pier—Dock Department. Between 25th and 26th streets, Candee & Smith, building material.



NEW YORK CITY.

EAST RIVER.

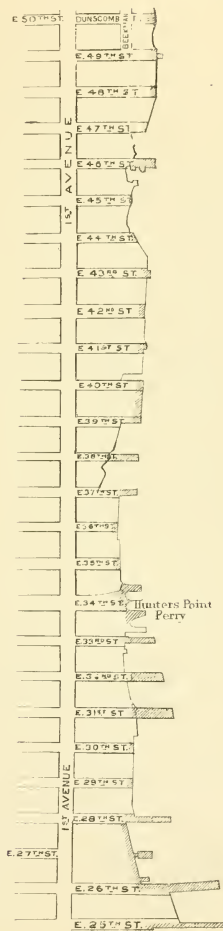


## From East 25th Street to East 50th Street

- E. 26th Street Pier—Public Charities and Correction; Steamers for Blackwell's, Ward's and Randall's Islands; Bellevue Hospital; Station No. 2 of the New York Yacht Club.
- E. 27th Street—Bellevue Hospital.
- E. 28th Street, Pier—General Merchandise; S. Stewart, coal and wood; United States Illuminating Co.
- E. 29th Street Pier—General Merchandise; Jas. Sinclair & Co.; The Tickahoe Marble Co.
- E. 30th Street—J. Cobb Doll, Pianoforte, etc.; Circular Saw Mills; Jackson's Architect Iron Works.
- E. 31st Street Pier—Steamers that land at this pier: Steamer Idlewild for Great Neck, Sand's Point, Port Washington, Sea Cliff, Glen Cove, Greenwood and Roslyn, L.I.; Steamer Shady Side for Stamford; Steamer Rosedale for Bridgeport; Steamer Al Foster for Fishing Banks; Steamer for Norwalk; Steamer Aurora, for Blackwell's, Ward's and Hart's Islands; Steamer Maid of Kent for Greenwich, Conn.; Steamer for Shrewsbury River, Long Branch, etc.
- Between 31st and 32nd Streets, Lowther & Bros., coal and wood; Wm. Wicke & Co., cigar box manufactory; Swift's Dressed Beef; Murray Hill Beef Co.
- E. 32nd Street Pier—Glen Island steamers land; Standard Gas Works; A. Lichtenstein Son & Co.
- E. 33rd Street Pier—General merchandise; Knickerbocker Ice Co.; A. L. & A. G. Kauffman, Colossus Cigar Factory; General Incandescent Arc Light Co.
- E. 34th STREET FERRY to Long Island City; Long Island Railroad.
- E. 35th Street—Jeremiah Skidmore Sons, coal and wood; Wm. P. Youngs & Bros., pine and hardwood lumber.
- E. 36th Street—Edward Elliott, coal and wood; Popham & Co., coal and wood.
- E. 37th Street—General merchandise; Knowles Bros. Marble Works; P. Foley's Marble Works; B. & J. Eschmann's Marble Works; Davis Bros., coal and wood; Baltimore & Ohio Railroad Station.
- Headland, Robinson & Vaughn, mason materials; Irwin's wood yard.
- E. 38th Street—Kip's Bay Brewing Co.; Incumbent Yard No. 3; Department of Street Cleaning.
- E. 39th Street—E. J. McClusky, klinking wood; A. Kernitz, architectural work in carving; Italian coal yard; Equitable Gas Co.
- E. 40th Street
- E. 41st Street—Equitable Gas Co.
- E. 42d Street
- E. 43d Street—Lehigh Valley Freight Station; Slaughter houses.
- E. 44th Street
- E. 45th Street—Slaughter houses.
- E. 46th Street
- E. 47th Street—Owens & Co., coal and wood.
- E. 48th Street—Wm. J. P. & S. in iron building material; Chas. A. Stedler, malster.
- E. 49th Street—P. De Witt & Co., coal and wood; D. Loomie, coal and wood.
- E. 50th Street—Unimproved water frontage.

From East 25th Street to East 50th Street.

NEW YORK CITY.

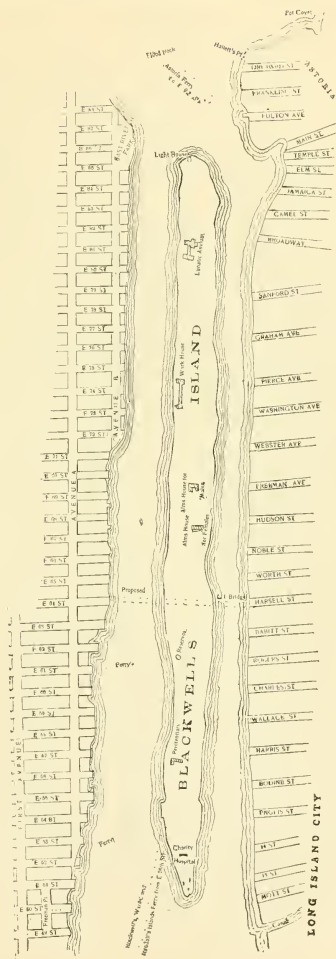


EAST RIVER.

### From East 50th Street to East 89th Street.

- E. 51st Street—Unimproved water frontage.  
 E. 52d Street—Admiral and Opera Light Cigarettes, manufacturing : New York Hygeia Ice Co.  
 E. 53d Street—A. P. Bigelow, lumber and timber : Z. S. Oppenheimer, coal and wood : Bell Bros., lumber and timber : Candee & Smith, masons' building material.  
 E. 54th Street—Consumers Brewing Co. of New York, Ltd. : private dock.  
 E. 55th Street—Swimming Baths.  
 E. 56th Street—Curtis & Blaisdell's coal pockets.  
 E. 57th Street—  
 E. 58th Street—Unimproved water frontage.  
 E. 59th Street—  
 E. 60th Street Pier—General merchandise.  
 E. 61st Street Pier—General merchandise.  
 E. 62d Street—Ehrenreich Bros.' coal pockets : John F. Kidney's Granite Works : Orr Bros.' Granite Yard.  
 E. 63d Street—Ehrenreich Bros.' coal pockets : bulkhead—Rockland Lake Ice Co.  
 E. 64th Street—Neidlinger & Sons, malsters.  
 E. 65th Street—  
 E. 66th Street—Unimproved water frontage.  
 E. 67th Street—  
 E. 68th Street—B. A. & G. N. Williams, jr., cut stone contractors.  
 E. 69th Street—Unimproved water frontage.  
 E. 70th Street—Davis' Saw-Mill.  
 E. 71st Street—E. Seidenberg, Stiefel & Co., cigar manufactory.  
     Between 71st and 72d Streets—Clausen's Malt House.  
 E. 72d Street—Clausen's Malt House.  
 E. 73d Street—Unimproved water frontage.  
 E. 74th Street—Thedford Coal Co.  
 E. 75th Street—Unimproved water frontage.  
 E. 76th Street—Farmers' Feed Co.  
 E. 77th Street—Unimproved water frontage.  
 E. 78th Street—General merchandise.  
 E. 79th Street—Chas. Huber & Son's Stone Works : J. R. Setz's Stone Yard : Knickerbocker Ice Co. : Nathaniel Wise, mason materials.  
 E. 80th Street—Nathaniel Wise, mason materials : Office of Madison Square Light Co. : Office of Manhattan Light Co. : Office of Harlem Light Co. : Masterson & Neary, blue stone.  
 E. 81st Street—M. McGrath's granite stone yard : Fleischmann's Vienna Model Bakery : J. Gough's artificial stone works.  
 E. 82d Street—  
 E. 83d Street—Unimproved water frontage.  
 E. 84th Street to E. 89th Street—EAST RIVER PARK.

## NEW YORK CITY.



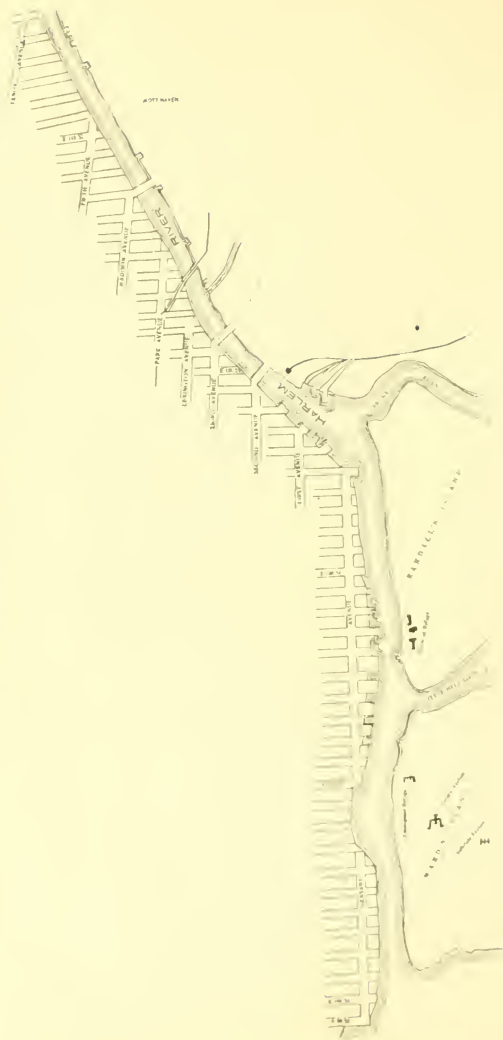
LONG ISLAND CITY.



## HARLEM RIVER.

THE project for a ship canal between the East and Hudson rivers by means of artificial connection between the Harlem River and Spuyten Duyvil Creek, and the improvement of the channels of these two bodies of water is one of considerable antiquity. The Morris family, under colonial grants, became the owners of large tracts of land, contiguous to the northerly side of the river, is still owned in the family. High Bridge was originally the head of navigation in the Harlem River, but there was a fair channel of about 10 feet deep at mean low water as far as Morris Dock, six miles from the mouth of the river, and a crooked one of 7 feet deep to Fordham Landing, one mile farther; there was no navigation of this latter section, except by small boats used for transporting building material to the 'annexed district.' Kingsbridge,  $1\frac{1}{2}$  miles from the Hudson River, was the head of navigation in Spuyten Duyvil Creek, but only at high water for vessels drawing 8 feet. The range of the tides in Harlem River varied from 5.5 feet at Third Avenue Bridge, to 6 feet at the mouth of Dyckman Creek, and in Spuyten Duyvil Creek was 3.8 feet. Observations of the tides affecting these waters show that there is not a free exchange of tides between Harlem River and Spuyten Duyvil Creek, but that there is practically a divide somewhere near Fordham Bridge, between the tides flowing from the East River into the Harlem and from the Hudson River into Spuyten Duyvil Creek. Comparing the tides of the Harlem River at Fordham Bridge with those of the Hudson River at the mouth of Spuyten Duyvil Creek, it is found: 1st, that the level of mean high water in the Hudson is near one foot lower than it is in the Harlem. 2nd, that the mean rise and fall of the tide in the Hudson is 2.12 feet less than it is in the Harlem. 3rd, That the mean duration of the rise of tides in the Hudson is 36 minutes shorter and the mean duration of the fall 26 minutes longer than in the Harlem. 4th, The mean level of the Hudson at the mouth of the Spuyten Duyvil Creek is 0.265 or a foot lower than at Fordham Bridge. 5th, High water occurs 1 hour and 34 minutes earlier in the Hudson than in the Harlem.

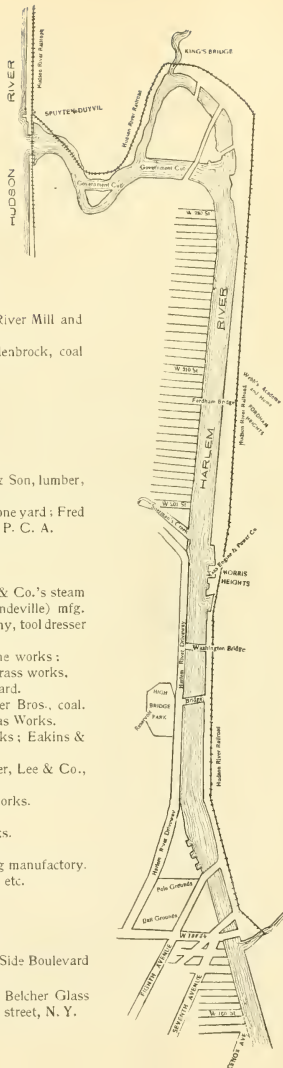
When the several improvements in the Harlem River are completed, during the present year, it is expected that there will be a connecting channel 150 feet wide between the Hudson and East rivers, navigable at mean low water by vessels drawing 12 feet. As the result of the year's work to June 30th, 1895, the channel in the Spuyten Duyvil Creek section of the improvement, which at the beginning of the year was from 14 to 150 feet wide and 9 feet deep at mean low water, was straightened by excavating a cut 12 feet deep at mean low water, and about 140 feet wide through the point of meadow south of Johnson's foundry and generally deepened to a depth of 12 feet at mean low water from the Hudson River to the west end of Dyckman Cut, so that vessels drawing 12 feet can ascend the improved channel at low water from the Hudson to the new bridge at Broadway. In the Harlem River the improved channel is from 150 to 180 feet wide and 9 feet deep at mean low water from Broadway to a point 600 yards north of Morris Dock; from this point south to McComb's Dam Bridge at 155th Street the available channel is 160 feet wide and 10 feet deep at mean low water, and thence 15 feet and over can be carried to Ward's Island, East River. The draft of vessels passing through the improved channel from the Hudson to the East River at low water is at present, therefore, limited to 9 feet; but by the completion of the work already under contract a 12-foot depth will be secured from river to river, in a channel with a width nowhere less than 150 feet. The River and Harbor bill, for 1896, has appropriated \$125,000 for continuing the improvement of Harlem River.





# HARLEM RIVER DIRECTORY.

See opposite page for Diagram for the beginning of Harlem River—  
from 89th Street



- E. 80th Street and East End Avenue—Beginning of Harlem River.  
Between East End Avenue and Avenue A—House of the Good Shephard.
- E. 90th Street—General merchandise
- E. 91st Street—General merchandise pier; Holmes and Philbrick, mason material.
- E. 92nd Street—FERRY TO ASTORIA.
- E. 93rd Street and Avenue A Consolidated Ice Co.; East River Mill and Lumber Co.  
Between Avenue A and 1st Avenue—Henicken & Willenbrock, coal and wood.
- E. 94th Street—Henicken & Willenbrock, coal and wood.
- E. 95th and 96th Streets—General merchandise.
- E. 97th Street—Holmes & Philbrick, mason material.
- E. 98th Street—G. L. Schuyler & Co., lumber and timber.
- E. 99th Street—Consolidated Gas Works.  
COLLEGE POINT FERRY.
- E. 100th Street—General Merchandise Pier—T. F. Simonson & Son, lumber, timber etc.; R. Walter, wood working mill.
- E. 101st Street—General Merchandise: John H. Scully, bluestone yard; Fred Schierenback Bottling Co.; Shelter for animals. A. S. P. C. A.
- E. 102nd Street to 103rd Street—  
HARLEM PRODUCE MARKET.
- E. 103rd Street—Hanlein & Co.'s steam stone works.
- E. 104th Street—M. C. Henry & Co.'s stone works; Henlein & Co.'s steam stone works; W. H. Camp (successor to H. V. Mandeville) mfg. doors, etc.; Shuttleworth's stone works; Walter M. Brophy, tool dresser and maker; M. Lennert, meat chopping establishment.
- E. 105th Street—General merchandise: McHenry & Co.'s stone works; Edwin Shuttleworth's steam stone works; Nathan's brass works.
- E. 106th Street—Nathan's brass works; W. H. Burke, coal yard.
- E. 107th Street—J. Beeber's Sons, second hand material; Meyer Bros., coal.
- E. 108th Street—Byrokstom iron railing works; Standard Gas Works.
- E. 109th Street—Sons, Scheubner & Fredrich, steam stone works; Eakins & Co., coal and wood.
- E. 110th Street—P. Michel & Co., kindling wood mill; Donner, Lee & Co., manufacturing hatters' furnishings.  
Between 110th and 112th Streets—Consolidated Gas Works.
- E. 112th, 113th and 114th Streets—General merchandise.
- E. 115th Street—Standard Gas Co.; Hill-Meyers' stone works.
- E. 116th Street—Rosenheimer Needle Co.
- E. 117th & 118th Streets—H. W. Wolfe & Co., wire and spring manufactory.
- E. 119th Street—Harlem coal pockets; also, Virginia pine oak, etc.
- E. 120th Street—Harlem Dispensary and Hospital.
- E. 121st and 122nd Streets—Boats to let.
- E. 123rd Street—Unimproved water front.
- E. 124th Street and Pleasant Avenue—Steers' Lumber Yard.
- E. 124th Street and 1st Avenue—William Meas & Co.; East Side Boulevard Rubber and Ivory Works.
- E. 125th Street and 1st Avenue—General merchandise; The Belcher Glass Works; Yellow Pine Co., offices at yard and 16 Beaver street, N. Y.

HARLEM RIVER—*Continued.*

## From East 126th Street to Madison Avenue Bridge.

E. 126th Street and 1st Avenue—Yellow Pine Co., offices at yard and 16 Beaver street, N. Y.  
Between 1st and 2nd Avenues—Harlem Casino and Garden.

## HARLEM RIVER PARK.

E. 127th Street—Swift's Chicago Dressed Beef.

## SECOND AVENUE BRIDGE.

Armour & Co., Chicago Dressed Beef.

## WEST SIDE OF RIVER.

Payne's Mills and Elevator; The Harlem River Milling Co.

## THIRD AVENUE BRIDGE.

Lexington Avenue and 131st Street—Harlem River Towboat Co., J. H. McConnell, Agent.  
Between 131st Street and Park Avenue—The Leclanche Co.  
Farrant & Votey Organ Co.; Haines & Co., Piano Manufactory.

## FOURTH AVENUE BRIDGE.

Between Park Avenue and 135th Street—J. C. Watson Co.'s Grain Elevator.  
136th Street and Madison Avenue—Sperry & Popham's coal pockets. New York Coal Co.  
137th Street and Madison Avenue—J. Dobbins, coal; Wood & Robinson, timber and lumber.

## MADISON AVENUE BRIDGE.

Brick Market. Above this are boat club houses and unimproved water frontage.

## EAST SIDE OF RIVER.

Estey Piano Co.; Haines Brothers' Piano Manufactory.  
John Bell, mason material.  
Dailey's Towing Line.  
S. Trimmer & Son, coal and wood.

## THIRD AVENUE BRIDGE.

Candee & Smith, mason materials.  
Harlem River Machine Works.  
A. D. Knapp, timber and lumber.  
The Henry Huber Co., plumbers' supplies.  
Rohitzek, coal pockets.  
Harlem River Iron and Machine Works.  
J. L. Mott Iron Works.  
Candee & Smith, mason materials.

## FOURTH AVENUE BRIDGE.

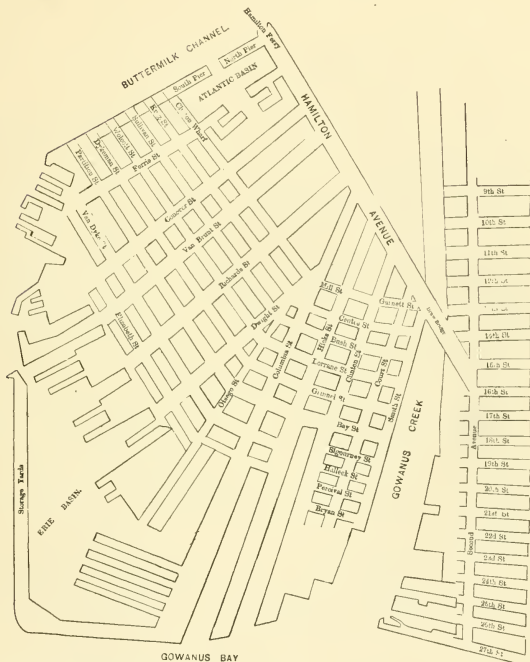
Church, Gates & Co., lumber and timber.  
E. M. Pritchard & Co., sash, door, etc., mill.  
John Bell & Son mason materials.  
138th Street and Mott Avenue—Wilson, Adams & Co., hard and soft woods.

## MADISON AVENUE BRIDGE.

John E. Allen's Machine Shop  
Wilson, Adams & Co., timber and lumber.  
E. H. Ware & Co., manufacturers of woodware.  
Parker's Steamers, shipiter.  
Marine Heights Gas Engine and Power Co.  
Marine Heights—Wood's Academy and Home for Shipbuilders.

## WATER-FRONT DIRECTORY.

## SOUTH BROOKLYN.



65th Street—FERRY TO WHITEHALL STREET, New York.

55th Street—Atlantic Yacht Club Basin.

53d Street—U. S. Projectile Co.

52d Street—Brooklyn City Power Works.

43d Street—Bush's Stores.

39th Street—H. W. Johns Mfg. Co., office 87 Maiden Lane, New York. Nassau Electric R. R. Power Station; Sanford's coal yard. Sheet-iron and Metal Works.

39th STREET FERRY to Whitehall Street, New York. Sea Beach R. R. T. Co., West End R. R.

AMBROSE PARK—38th Street to 32d Street.

32d Street—Ambrose Basin.

32d to 28th Streets—Unimproved water frontage.

28th Street Pier—Arronott's Stores; Fruit steamers; F. W. Starr, lumber and timber.

## GOWANUS CREEK.

## EAST SIDE—FROM ENTRANCE TO HAMILTON AVENUE BRIDGE.

27th Street Pier—Peter Mallett & Co. (Waverly Stores); Morse Iron Works Co., office 66 New Street, New York; Ross Iron Works, office 81 Broad Street, New York. Brooklyn Dry Dock and Warehouse Co.; John McNeil's Dry Dock and Shipyard. L. P. Jones, shipwright.

26th Street Pier—Manning Yacht Agency Basin.

25th Street Pier—C. W. Willard's coal pockets; Roger's Export Lumber yard.

24th Street—Hall & Hurlbert, ship and machine smiths; Geo. E. Lanagan's Engine and Boiler Works. Between 24th and 22d Streets—Wm. M. Tebo's Dry Dock and Yacht Basin.

22d Street—Jansen, shipyard and sparmaker; Swimming Baths.

21st Street—Timber Basin.

20th Street Pier—F. W. Cornish & Co's spar yard; Adams & Jimenis, lumber, office 114 Wall Street, New York; Holder & Smith's spar yard; Hilton & Dodge Lumber Co., New York office 81 New Street; Tiegarten's Dry Dock, successor to Geo. Townsend.

19th Street—Hilton & Dodge, lumber; Brooklyn Iron and Block Co.

18th Street—Yellow Pine Co. (Yard E) successors to Brooklyn Saw Mill Co.

14th Street and Hamilton Avenue—Nelson Bros. coal pockets; Brooklyn Lumber Co.; J. B. Wood's general merchandise dock.

## WEST SIDE—FROM ENTRANCE TO HAMILTON AVENUE BRIDGE.

Foot of Court Street—Downing & Lawrence's Dry Docks; C. & R. Pollen, shipwrights, etc.; Hilton & Dodge, (successors to Beard & Kingsland) timber and lumber; M. Ellessor's Machine Works.

Smith and Halleck Streets—Mica Roofing Co.; S. W. Bowne & Co., hay and grain.

Smith and Bay Streets—Bowne's Stores.

Smith and Grinnell Streets—Clonbrook Boiler Works; White & Price Machine Works; Nelson Bros. coal pockets; The Hugh Bond Gowanus Towing Co.

## GOWANUS CANAL.

## PROCEEDING NORTH FROM HAMILTON AVENUE BRIDGE.

HAMILTON AVENUE BRIDGE—West side of draw is 37 feet 9 inches wide at low water; depth at low water 12 feet; East side of draw is 33 feet 7 inches wide at low water; depth at low water 11 feet.

## WEST SIDE.

National Cotton Seed Oil Co.  
G. W. Bush's Salt Works  
Artificial Stone Co.  
Hagerty's Glass Works.  
Brooklyn and Coney Island Power House.

## EAST SIDE.

Hobby & Doudy, mason material.  
Metropolitan Gas Co.  
Hobby & Doudy, mason material.

## NINTH AVENUE BRIDGE.

West side of draw is 31 feet wide at low water, depth at low water, 11 feet. East side of draw is 36 feet wide at low water, depth at low water, 12 feet.

## WEST SIDE.

Grey's Sulphur Works.  
N. Ryan's sand and gravel yard.  
H. J. Baker Bros.' Chemical and Fertilizer Works.  
Citizens Gas Co.  
Buell's sand and gravel yards.  
Consolidated Ice Co.  
P. T. Sharp & Co., coal and wood.  
Nicholas Davis, coal yard.

## EAST SIDE.

Cream Tartar Works. German Hartshorn Works.  
IN 7TH STREET SLIP.  
Cream Tartar Works, Webster & Quinn's coal yard.  
Fitzsimmons' sand and gravel yard; Wilson & Bailey, sewer pipe and hose-reels works; Davis' and Wadsworth's coal yard; Hartshorn Fugging Mills; Robt. Ayers, coal yard; Still's Sulphur Works; Wood's Dock.

## 4TH STREET SLIP.

Fitchfield's dock; Briggs's machine shop; Allen's rope walk; Wood's coal yard; Neugasser's coal yard; Sumner's Tin Factory; Powell & Tins coal yard; Schneider & Horsemann, coal; Consolidated Ice Co. dock; Cooper's stone yard; Blaisdell's stone yard; Bradley's Concrete Pavement Co.; Candee & Co., building material.

SOUTH BROOKLYN—GOWANUS CANAL—*Continued.*

## THIRD STREET BRIDGE.

West side of draw is 32 feet wide at low water; depth at low water, 8 feet. East side of draw is 33 feet wide at low water; depth at low water, 8 feet.

## WEST SIDE.

Long Island Wood Co.; S. Dean's stone yard;  
Truesdell & Shaw, hay and grain; H. S. Chis-  
chain & Clark, building material.  
Standard Oil Works.  
Watson, Pettinger & Co., lumber; John Morton  
& Sons, building material.

## EAST SIDE.

L. H. Marks' coal yard.  
Nassau Railroad Power House.  
Gold & Nichol's stone yard.  
Watson & Pettinger's lumber yard.

## CARROLL STREET BRIDGE.

West side of draw is 37 feet wide at low water; depth at low water, 8 feet. East side of draw is 37 feet wide at low water; depth at low water, 8 feet.

## WEST SIDE.

T. H. Lidford's coal yard.  
E. H. Itjen's coal and wood yard.

## EAST SIDE.

J. H. Lomas & Co., lumber.  
Kenyon & Newton, lumber.

## UNION STREET BRIDGE.

West side of draw is 32 feet wide at low water; depth at low water, 8 feet. East side of draw same dimensions.

## WEST SIDE.

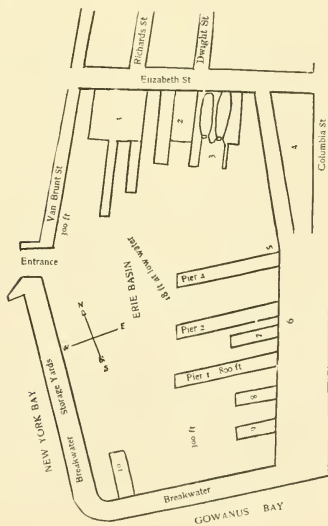
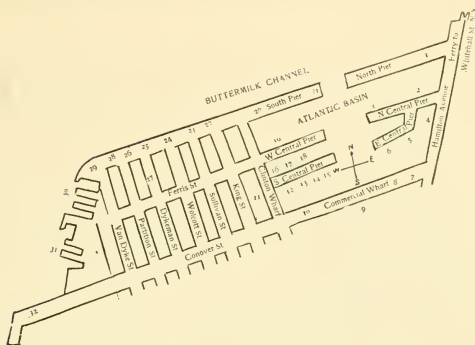
J. F. Schmedike's coal yard.  
Nelson & Son, coal yard.  
Wm. Murtah's coal and wood yard.  
J. F. Hughes, building material.

## EAST SIDE.

Dikeman's lumber yard and box factory.  
Fulton Municipal Gas House.  
I. T. Stone's coal yard.  
Kelsey & Loughton's coal yard.

Bulkhead—Brooklyn City Dock.





## BROOKLYN

NOTE.—The following are also included in lists of the Directory, and have standing numbers in Diction. for reference. To designate the business class, numbers given. The ship agent, Stevedoring, Brokerage, water front have been furnished a copy and should be Brokers' Wharf and Warehouse Co. (for record not to mislead the original titles are here given instead, as Merchants' Stores, Broker's Stores, etc.)

## HAMILTON FERRY TO WHITEHALL STREET, NEW YORK.

Foot Sackett Street—Ward's Stores.

1. Brooklyn Wharf and Warehouse Co.'s Grain Elevator Pier.
2. Pier 31—Union Stores; Trinidad Shipping and Trading Steamship Line.
3. Pier 32—Union Stores; Anchor Steamship Co. (freight) for Glasgow, Liverpool, etc.; Henderson Bros. agents, 7 Bowling Green, New York.
4. Pier 29—Union Stores; Anchor Steamship Line for Glasgow, Liverpool, etc.
5. Greason & Howland's coal pockets.
6. Hill Bros. Stores.
7. Pier 1—J. P. Robinson Congress Street Stores; West India Steamship Line.
8. Pier 2—J. R. Robinson's Stores.
9. Pier 3— " " "
10. Pier 24—Beard's Stores; Red Cross Steamship Line for Pilley's Island and St. John's, Newfoundland, and Halifax, N. S.; Boring & Archibald, general agents, 9 Stone street, New York.

Between Amity and Pacific streets—Knickerbocker Ice Co.

11. Pier 23—Doy's Stores and Grain Elevator.

12. Pier 22— " " "

## SOUTH FERRY TO WHITEHALL STREET, NEW YORK.

Ferry Repair Yard

13. Pier 3—Woodruff's Stores and Grain Elevator.
14. Pier 2—Woodruff's Stores; Vogemann Steamship Line for Hamburg.
15. Pier 1—Woodruff's Stores; Royal Dutch West India Mail Service Steamship Line for Port-au-Prince, Aux Cayes, etc.; Kohnhardt & Co., agents, 12 Beaver street, New York.
16. Pier 4—Prentice Stores; Wilson Steamship Line for London.
17. Pier 2—Prentice Stores; Wilson Steamship Line for Hull.
18. Pier 1—Prentice Stores; Wilson Steamship Line for Newcastle-on-Tyne; Sanderson & Sons, agents, 22 State Street, New York.

## WALL STREET FERRY to Wall Street, New York

19. Pier 2—Pierrepont Stores; Red D. Line Steamships for Laguarda, Puerto Cabello; Boulton, Bliss & Dillett, general agents, 135 Front Street, New York.
20. Pier 1—Pierrepont Stores; Cap'n Labres French Steamship Line for Marseilles and Mediterranean ports; Jas. W. Elwell & Co., general agents, 47 South Street, New York.
21. Pier 2—Mediterranean Stores; Mediterranean and New York Steamship Co., for Mediterranean ports; Phelps Bros. & Co., general agents, 29 Broadway, New York.
22. Pier 1—Mediterranean Stores; Mediterranean and New York Steamship Co., for Mediterranean ports; Phelps Bros. & Co., general agents, 29 Broadway, New York.
23. Pier 10—Robert's Stores; Lamport & Holt Steamship Line for Brazil, etc.
24. Pier 2—Harbeck Stores and grain elevator.
25. Pier 1—Harbeck Stores.
26. Pier 1—Watson's Stores.
27. Pier 1—Martin's Stores; Booth Steamship Co. (London) & Red Cross Line to North Brazil and Amazon River; Shipman Green, agent, 117 Pearl Street, New York.
28. Pier 2—Watson's Stores; Lamport & Holt Steamship Line for Brazil and River Plate ports; Bush & Levins, agents, 101 Produce Exchange Building, New York.
29. Pier 1—nos. 10, 11—Martin's Stores.
30. Pier 1—nos. 9, 10—Martin's Stores; Knickerbocker Ice Co.

Brooklyn Wharf—Atlantic White Lead Works.

BROOKLYN ANNEX FERRY to Pennsylvania Railroad Depot, Jersey City

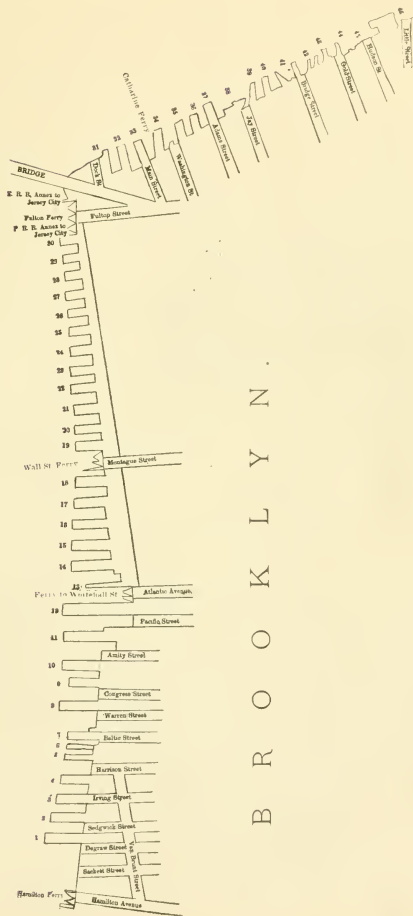
FULTON FERRY 301 Fulton Street, New York.

BROOKLYN BRIDGE



EAST RIVER.

BROOKLYN.



BROOKLYN—*Continued.*

## Brooklyn Bridge to Navy Yard.

## BROOKLYN BRIDGE

Bridges 906.—Rockaway steamers land here.

Marston & Sons, coal and wood.

Brook Street.—Fulton Stores.

11. Pier 3.—Empire Stores.

12. Pier 2.—Empire Stores; West India Steamship Line.

13. Pier 1.—Empire Stores; Norton's Line of Steamers.  
CATMARINE FERRY to Catharine Street, New York.

14. Donald McDonald's lumber yard.

15. Joseph H. Colver's coal and wood yard.

16. Wildell & Co.'s cooperage, office 21 Old Slip, New York.

17. Messrs. Offerman & Heissenbuttel, coal pockets; E. W. Bliss & Co., machinery works; Arbuckle's  
Adams Street Mills.

18. Messrs. Offerman & Heissenbuttel Coal Co.'s pockets.

19. Arbuckle's Coffee Stores; Frost Bros., coal and wood.

20. Miller & Van Winkle, steel, wire-spring manufacturers.

21. N. Y. C. & H. P. R. freight station.

22. Ice boats des barge.

23. E. P. Squibb & Son's chemical works.

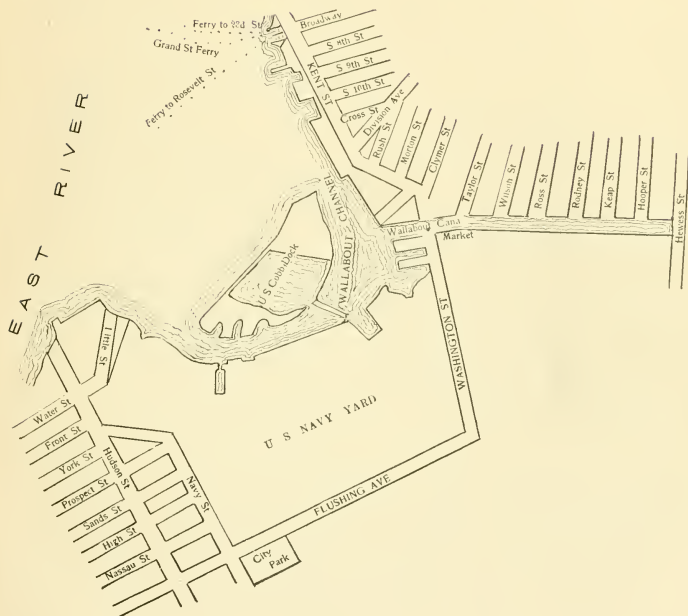
24. Atlantic White Lead Works.

25. Brooklyn Gas Works.

26. " " "

## BROOKLYN NAVY YARD.

**T**HIS remarkable bay, called the Wallabout, formerly named by the old Dutch colonists "Wall Bight," or "Fallow Bend," is the site of the present Navy Yard. After the battle of Long Island had been won by the British, the Wallabout Channel became a favorite anchorage for their men-of-war. The prison hulks, the most notorious of which was the "Old Jersey," or the "Hell," as she was called, were moored here for many years during the War of Independence. The horrors of these prison ships, where thousands of unfortunatees were confined by the English, is a matter of historical record. At the close of the War of Independence the land adjoining the Wallabout was owned by John Lapine, who started a shipyard, from which he launched a merchant ship and the U. S. frigate John Adams. He seems to have had the intention, originally, to build a battery at the Wallabout, to contribute to the defense of New York Harbor. In the deed transferring the jurisdiction of the water-front to the General Government it is provided that the national right to these waters shall continue "so long as the same shall be used and applied for the safety and defence of the said city and port of New York and its harbor, and never to the people of the State of New York when not applied to the purpose aforesaid." The first commodore of the Navy Yard was Lieutenant Thorne. The first receiving ship stationed there was a large sailing steam-battery called Fulton the First. This ship blew up in June, 1856, causing the death of four crew men. Next came the North Carolina, which was a landmark for some years, and she was succeeded by the Vermont, an old line-of-battle ship. The Navy Yard has a water frontage of some miles in extent.



## WALLABOUT CREEK.

First Pier at mouth of creek—Ridgewood Ice Co.; Jas. Brown, hay and straw.  
 Second Pier—General merchandise; P. Neville & Son, hay, etc.

## PROCEEDING UP THE CREEK—RIGHT HAND SIDE.

1. Watson & Heles, ice.
2. Tellie's coal yard.
3. John T. Welby's ice dock.
4. Brick piers discharge.
5. General merchandise.
6. Coal boats discharge.
7. August Grill's Ice Depot.

## LEFT HAND SIDE.

8. Thos. F. Taylor's coal pockets.
9. Lead Pipe and Trap Works. (H. P. Reed.)
10. S. Tuttle's Sons coal pockets.
11. Knig & Adams, mason material.
12. Walter T. Klotz & Bros., mason material.
13. The Oakley & Wilson Mfg. Co.
14. Ideal Rubber Co.
15. Crescent Electric Machine Co.
16. J. T. Story, coal and wood.
17. The Barber-Pritchard Coal Navigation Co.
18. Andrew Beard's stone yard.
19. Eastern Bermudez-Asphalt Paving Co.
20. H. F. Burroughs Co., masons material.
21. Chemical Steel Works.
22. Johnson Bros., lumber yard.

## FROM MOUTH OF CREEK—NORTH.

- Clymer Street—Bever's Elevator; G. Hoyt & Co., hard woods.  
 Between Clymer and Rush Streets—The Nassau Gas Light Co.  
 Rush Street—Ranney Refrigerator Co.; I. Totten, coal and wood; Knickerbocker Ice Co.  
 Division Street—Brooklyn City R. R. Machine Works.  
     Between Division and S. 11th Streets—Muller, Sierck & Co.'s Sugar House.  
 S. 11th and S. 12th Streets—Merrill Bros., machine shop; People's Gas Light Co.  
     Between S. 12th and S. 9th Streets—Brooklyn Distillery Co.  
 S. 9th and S. 10th Streets—Delaware, Lackawanna and Western R. R. station (freight); Sherman Iron Works.  
     Between S. 9th and S. 8th Streets—Manhattan Leather Belting Co.  
 S. 8th and S. 7th Streets—FERRY TO ROOSEVELT STREET, New York.  
 Broadway—FERRY TO GRAND AND EAST TWENTY THIRD STREETS, New York.

## BROOKLYN, E. D.—From South 6th Street to Newtown Creek.

S. 6th Street—F. W. Wurster & Co.'s Rolling Mill; Geo. P. Jacobs & Co., supplies for plumbers.

Between S. 6th and S. 5th Streets—American Sugar Refining Co. (formerly Havemeyer's).

S. 5th to S. 1st Streets—American Sugar Refining Co.

Grand Street—FERRIES TO GRAND AND HOUSTON STS., New York.

Freight station of Baltimore and Ohio R. R.; Central R. R. of N. J.; Phila. and Reading R. R.

N. 1st Street—F. E. Teves, coal pockets.

N. 2d Street—Amer. Sugar Refining Co., (for. Havemeyer's)

N. 3d Street—“ “ “ “ “ “

N. 4th Street—Palmer's Stores.

Between N. 4th and N. 5th Streets—Pennsylvania R. R. freight station.

N. 5th Street—Pennsylvania R. R. freight station.

Between N. 5th & N. 6th Streets—Palmer's Dock: New York, Lake Erie and W. R. R.

N. 6th Street—Palmer's Dock—Lehigh Valley R. R.; N. Y. Central and H. R. R. freight station.

Between N. 6th and N. 7th Streets—American Sugar Refinery (Havemeyer's) barrel factory.

N. 7th Street—Old Dominion Steamship Co.'s freight station.

N. 8th Street—Palmer's Dock—N. Y. Lackawanna and W. R. R.; N. Y. Central & H. R. R., West Shore R. R.; Lehigh Valley R. R. freight station; Potato market.

N. 9th Street—Palmer's coal pockets; Lehigh Valley R. R. freight.

N. 10th Street—Palmer's grain elevator; Lehigh Valley R. R., freight.

Between N. 10th and N. 11th Streets—Standard Oil Co.'s Domestic Trade Dept., J. C. Miller, mgr.

Between N. 11th and N. 12th Streets—Williamsburgh Gas Light Co.

N. 12th Street—Standard Oil Works.

N. 13th Street—Pratt's Oil Works; Henry Vogt & Bros.' Manufacturing Co. BUSHWICK CREEK BRIDGE.

Quay Street & Franklin Steam Boiler Works; C. Winnant's Spar Yard; H. Lawrence's Ship Yard.

Between Quay and Colyer Streets—Continental Iron Works.

Colyer Street—Continental Iron Works; American Jute Mills; Knickerbocker Ice Co.

Noble Street—American Jute Mills Storage.

Milton Street—W. C. W. Child's Iron Works.

Between Milton and Greenpoint Avenue—John Egls & Son's Ship Yard.

GREENPOINT AVENUE.

FERRIES TO E. 10th & E. 23rd STREETS, New York.

Kent Street—J. W. & W. T. Smith, timber yard; Faber's Pencil Works.

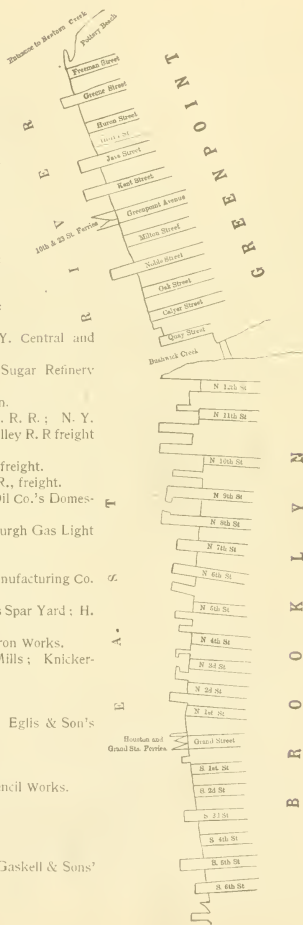
JAVA STREET—John C. Orr & Co.'s Saw Mill.

India Street—John C. Orr & Co.'s Saw Mill.

Huron Street—Wm. Uptegrove & Bro.'s lumber yard.

Greene Street—New York Dye Wood Co.

Freeman Street—P. M. Dingee & Sons' timber yard; Wm. Gaskell & Sons' Greenpoint Bolt Works.



## NEWTOWN CREEK.

**N**EWTON Creek is a tidal stream about four miles long. The range of tides is 4½ feet approximately. It was but a few years ago that this waterway was comparatively unimportant, except at its mouth, owing to an insufficient depth of water. It has now reached a point where it ranks among the most important streams in the United States according to its size, in the extent of its commerce. In May last (1895) the 18-foot channel from the entrance to Vernon Avenue Bridge was 175 feet wide and 152 feet wide at and near the bridge, with a 21-foot channel 40 feet wide in the centre. The channel from Vernon Avenue Bridge to Central Oil Works was 80 feet wide and 16 feet deep, mean low water, with an 18-foot channel 40 feet wide through the centre; from the Central Oil Works to Queen's County Oil Works, 100 feet wide and 14 feet deep; from the latter works to Nichols Chemical Works 100 feet wide and 12 feet deep; from Nichols Chemical Works to Maspeth Avenue, 75 feet wide and 10 feet deep; from Maspeth Avenue to Metropolitan Avenue, on the East Branch, 100 feet wide and 10 feet deep; and on the West Branch, 50 feet wide and 10 feet deep. In the English Kills Branch the channel is 100 feet wide and 8 feet deep from Nichols Chemical Works to a point 700 feet to the eastward.

The River and Harbor bill of 1896 authorizes contracts for the improvement of the channel not to exceed in the aggregate \$420,000, the first appropriation under the new bill is \$30,000. A uniform depth of 18 feet, at mean low water, and a width of 125 feet will be secured for the channel from the mouth of the creek to the head of navigation.

### NEWTOWN CREEK DIRECTORY.

The business firms come in rotation as you proceed up the creek from its entrance.

#### SOUTH SIDE.

1. Bay Street—Z. Bergen's lumber yard.
2. Blue Street—Geo. H. Reeves' lumber yard.
3. Pink Street—Lugan Iron Works.
7. Red Street—American Sugar Refinery.
8. Ann Street— " " "
9. Dick Street—E. P. Gleason Mfg. Co.'s Works.

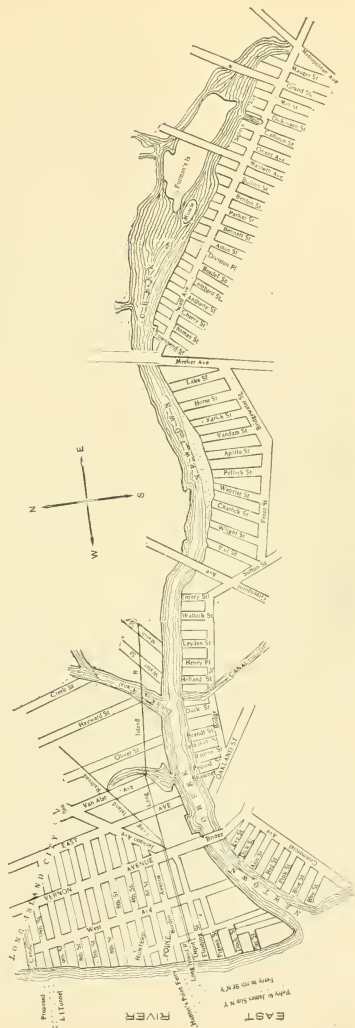
#### NORTH SIDE.

10. Chelsea Jute Mills.
11. C. & D. McWilliams' dry dock.
12. Long Island Lumber Co.
13. H. F. Boroughs & Co., lumber.
14. Whiting Lumber Co.
15. Roscoe Lumber Co.
16. Union College pumping dock; Standard Silica Cement Co.
17. Jas. H. & F. L'Hommedieu, lumber.
18. Newtown Creek Towing Co. (Russell Bros.)

### VERNON AVENUE BRIDGE.

19. Olefene Oil Works.
20. Brooklyn Oil Works.
21. Church & Co.'s (Dock A) Soda and Chemical Works.
22. Daniel M. Callum's coal yard.
23. E. C. Smith's lumber and box factory.
24. Greenpoint Wood Co.
25. Geo. W. Piper & Co., coal.
26. John Cooper's fire clay dock.
27. Post & McCord's Iron Works.
28. Ridley, Brixne & Donald Iron Works.
29. H. F. Linters Mfg. Co.'s Works.
30. Morris & Common's Dredging Co.
31. W. H. Moserete, building material.
32. Jay, D. Leary, boiler maker and contractor.
33. Empire Refining Co., Limited.
34. Kings County Oil Works, No. 4.
35. Welsh's lumber basin.
36. Eclipse Oil Works.

70. N. Y. Vol. Life Saving Service.
71. White Star Towing Co.
72. Wm. Meserole, mason material.
73. C. Cunningham's Novelty Boiler Works.
74. Knickerbocker Ice Co.'s depot.
75. N. W. Godfrey's gravel yard.
76. Mehlen's Family Oil Co.
77. D. S. Jones, coal and building material.
78. Thos. Morgan's grain elevator.
79. Long Island Marine and Construction Co.
80. J. N. New & Bro., coal and wood.
81. Eppinger & Russell's Creosote Works.
82. Simonds Mfg. Co.'s factory.
83. Empire Storage & Lumber Co.
84. L. I. R. R. Co.'s range of docks.



## GREENPOINT AVENUE BRIDGE.

## SOUTH SIDE.

17. Collins & R. H. W. Co.'s Works.
18. Kline's Station & Warehouse No. 1.
19. Knapp's Lumber & Saw Works.
20. Standard Lumber & Sash.
21. Crane Works.
22. Murray & Abrahamson's Works.

## NORTH SIDE.

85. Brown's Lumber dock.
86. New York Refining Co.
87. Fosselman's Eastern Distilling Co.
88. Van Lierstine Bros.' Refining Works.
89. Preston Fertilizer Co.
90. Queens County Oil Works.
91. Cal's Cemetery dock.

## MEYER AVENUE BRIDGE.

14. Brown's Green's Works.
42. American Manufacturing Works.
43. Johnson's Engine Co.'s Works.
44. Linn's Oil Co.'s Engine Works.
45. Peter's Engine & Saw Works.
46. Green's Dock.
47. Andrew's Wood & Sash.
48. George's Manufacturing Co.
49. Tinsmith & Sheet Metal Co.
50. J. W. Johnson's Lumber Co.
51. Knapp's Wood & Sash Works.
52. Long Island Wood Co.'s Office and Yard.
53. Frederick's Lumber & Sash Works.
54. Chapman's Works.

92. Nichols' Concrete Co.'s Works.
93. Reid Fertilizer Co.'s Works.
94. Halberman Mfg. Co.'s Enamel Ware Works.
95. Edna and Preston's Bone Works.
96. Andrew Wissel's dock.
97. Miller & Co.'s Fertilizer Works.
98. A. M. Fertilizer Co.'s Works.

## METROPOLITAN AVE. &amp; GRAND ST. BRIDGES.

17. East River Grand Street Draw Bridge.
18. Bergmann's Ice Co.'s Works.
19. John Grogan's dock.
20. D. S. Condit's Saw Works and Dock.
21. John H. Wilson's dock.
22. Augustus' Dock.
23. Brooklyn Engine Works.
24. John H. Remond's Dock and yard.
25. W. J. Kline & Son's Dock and yard.
26. H. W. Wilson's dock.

## East River—Grand Street Draw Bridge.

100. Cross & Herk, coal.
101. Adams, Sampson & Sons, oil distillery.
102. C. D. Smith, building material.
103. Hardy, Worth & Co.'s Lumber docks.
104. S. F. S. & Co., coal pockets.
105. Cross, Austin & Ireland Lumber Co.

## WEST BRANCH.

106. Louis Besser's Lumber and planing mills.
107. Cross, Austin & Ireland water front.
108. C. H. Reynolds & Son, coal pockets.
109. Theo. R. Chapman's docks.
110. Wm. Cooper Estate dock.
111. John Grogan's dock.
112. John & Mermaid's dock.
113. T. J. Smith & Co.'s dock.
114. J. Grogan's dock.
115. Geo. T. V. Mosely's dock.
116. John H. Remond's dock.
117. Theo. R. Chapman's dock.
118. Brooklyn Queens Co. & Summit R.R. dock.

## From West End, North River Cemetery (continued north to Astor).

Franklin Pl. Works. — Long Island, Painted Freight Dock. — Long Island Freight Depot.  
 Landing in East River from Astor and Times wharf, New York.

East River from Long Island, Painted.

East River from Long Island, Painted.

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## NEW YORK RIVER BRIDGES.

	Width of Deck.	Height above H.W.
Verplanck Avenue Bridge.	64 ft.	7.3 ft.
Duane St. Bridge, Commercial Wharf.	68 ft.	8.0 ft.
Canal Street, Market Avenue.	65 ft.	9.7 ft.
Grand Street Bridge.	67 ft.	5.8 ft.
Wholesale Avenue Bridge, "Wholesale Avenue" and Grand Street, Long Island.	62 ft.	8.7 ft.



## JERSEY CITY.

### COMMUNIPAW DIRECTORY.

In Cove—National Storage Co.'s Warehouses and Docks; Marine Vapor Engine Co.

Proceeding North from Cove.

The first is Fort Liberty Pier.

Pier 8—Communipaw Coal Co.

Piers 7, 6, 5, 4—Central R. R. of New Jersey (freight).

Between Piers 4 and 3—C. R. R. of N. J. float bridges.

Pier 3—Central R. R. of New Jersey (freight).

FERRY TO LIBERTY STREET, New York.

Pier 2—Central R. R. of New Jersey, Sandy Hook Steamers lay up.

Pier 1½—Lehigh Valley R. R., freight.

Between Pier 1½ and Pier A—Lehigh Valley R. R. floats.

Piers A, B, C, D—Lehigh Valley R. R., freight.

### MORRIS CANAL BASIN.

#### SOUTH SIDE.

Proceeding up the Basin.

1. Rickard & Son's Dry Dock.
2. Pier G—Lehigh Valley R. R., freight (pier not shown on diagram).
3. Pier H—Lehigh Valley R. R., freight (pier not shown in diagram).
4. Lehigh Valley R. R. Stock Yard.
5. U. S. Building Material Co., office 621 Broadway, New York.

#### NORTH SIDE.

Proceeding up the Basin.

6. Lehigh Valley R. R. Coal Pier.
7. American Sugar Refining Co., Washington St.
8. American Sugar Refining Co., Warren Street.
9. American Sugar Refining Co.
10. M. Davis, mfg. propeller wheels.
11. J. H. Davis' Dry Dock.
12. John Swanson's Dry Dock.
13. Gap—Central R. R. Coal Co.
14. The Barber Asphalt Paving Co.
15. P. H. Doherty, ice depot.
16. Jas. P. Hall, building material.
17. P. Sanford Ross's log basin.
18. Palmer's Dry Dock.
19. Wm. Rickard's Dry Dock.
20. Robt. Smith's Dry Dock.
21. Washburn's brick yard.

From mouth of Morris Canal Basin, going North.

Foot of Hudson Street—Colgate's lumber dock.

First pier—Lehigh Valley, coal.

Between first pier and Essex Street—The Brown Dry Dock Co.; Theo. Smith & Bro., machine and boiler shop.

Between Essex and Morris Street Pier—Vulcan Iron Works.

Morris Street Pier—General merchandise.

Between Morris and Sussex Streets—Vulcan Steam Boiler Works; New Jersey Ice Co.; Cushing Co.'s Stores.

Sussex Street Pier A—International Navigation Co. (Red Star Steamship Line); Jersey City Brass Foundry.

Between Sussex and Grand Streets—Jersey City Steam Copper and Brass Works.

Grand Street Pier B—International Navigation Co. (Red Star Steamship Line).

Between Grand and York Streets—Jersey City Stores.

Foot of York Street, Pier C—Penn. R. R.; Sicilian Steamship Line.

PENNSYLVANIA ANNEX to Fulton Street, Brooklyn.

FERRIES to Cortlandt and Desbrosses Streets, New York.

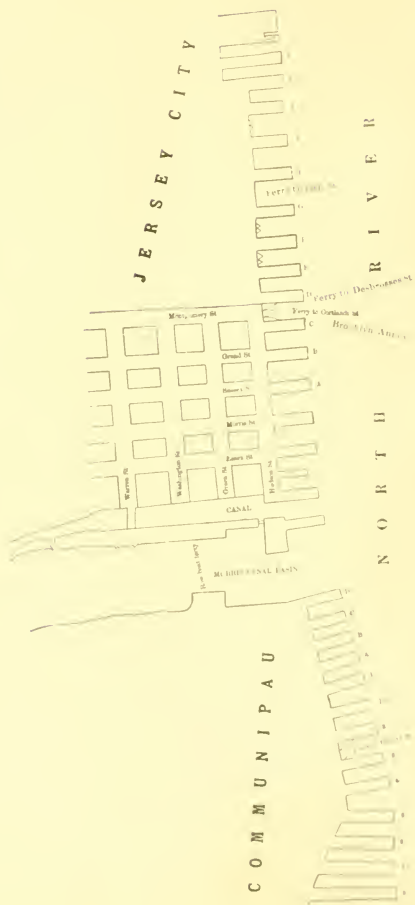
Pier D—Adams Express, freight.

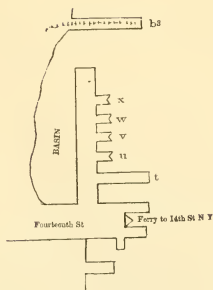
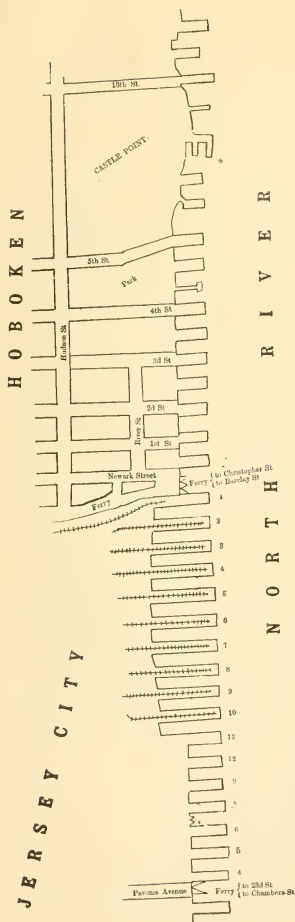
Penn. R. R. floats.

Pier E—Penn. R. R. freight.

Penn. R. R. floats.

Pier F—General merchandise.





## JERSEY CITY.

See Diagram, opposite page.

Allison's Dry Dock and Shipyard.

BAY STREET FERRY to W. 13th St., New York.

Pier G—General merchandise.

Pennsylvania Railroad floats.

Piers H, I, J, K, L—Pennsylvania Railroad, freight.

Coal Pier—Pennsylvania Railroad.

Central Stock Yard and Transit Co.

New York, Lake Erie and Western Grain Elevator.

See Diagram, this page.

Pier 2—Manhasset Steamship Line; Simpson, Spruce & Young, agents, 29 Broadway, New York.

PAVONIA FERRIES to Chambers & W. 23d St., N. Y.

Pier 4—Wells, Fargo & Co.'s Express.

Pier 5—Erie Railroad track pier,

Pier 6—Erie Railroad, freight.

Erie Railroad, floats.

Piers 8, 9—Erie Railroad floats.

Piers 13, 12—Del., Lackawanna & W'n R.R., freight.

“ “ “ “ floats.

“ “ “ “ freight.

## HOBOKEN

Pier 10—Hoboken Coal Co.'s coal piers.

Piers 9, 8—Wm. Horre & Co.'s coal piers.

Piers 7, 6, 5—Delaware, Lackawanna & Western Railroad, coal.

Piers 4, 3, 2 " " " " miscellaneous.

Pier 1 " " " " Depot.

FERRIES to Christopher and Barclay Streets, New York.

Pier 3, 2, 1—Hamburg American Packet Co.'s steamship line: general office, 37 Broadway, New York.

Pennsylvania Railroad, Hoboken machine shops.

Consolidated Iron Works, steam engines and boilers.

Piers 3, 2, 1—North-German U. S. M. Steamship Line—Oelrick & Co., agents, 2 Bowling Green, New York.

U. S. Warehouse, Hoboken Stores; Campbell & Co.'s storage.

4th Street Pier—Thingvala Steamship Line, direct service to Scandinavia.

5th Street Pier—Netherlands American Steam Navigation Co. (U. S. M.) for Rotterdam and Amsterdam; passenger agency, 39 Broadway, New York.

6th Street Pier—Phoenix Steamship Line to Antwerp; Sanderson & Co., 12 State Street, New York, agents. Campbell & Co., storage.

Pier between 6th & 7th Streets—Netherlands American Steam Navigation Co. (U. S. M.) for Rotterdam and Amsterdam.

Chas. S. Schjeltz, mason materials.

7th Street Pier—Discharging plant of Pocahontas Coal Co.

Pier—Rock Wall Plaster Co.; Jacob Vanderbilt, building material, sand and gravel for concrete.

9th Street Piers—Pocahontas Coal Co.'s coaling station for tugs and yachts (removed from 35th St., N. Y.).

Hoboken Ferry Co.'s Machine Shops

Tietjen and Lang's shipyard.

New Jersey Yacht Club.

Myers' Excursion and Navigation Co.'s Repair Yard

Ocean Steamship Co. of Savannah (freight).

Yellow Pine Co.'s saw and planing mills.

R. H. May & Co., cut glass works.

North River Iron works, W. & A. Fletcher Co.

Elysian Machine works, Fred A. Verner.

FERRY TO 14th STREET, New York.

Pier 1—General Merchandise.

10—John Mc Carthy Bros.' dry dock.

15—Tietjen and Lang dry dock.

100—Willard & Co. & Johnson's dry dock.

100—Frank Godey's dry dock.

100—Willard & Co. Pier.

## HUDSON RIVER.

## DISTANCE BY WATER FROM NEW YORK TO TROY.

WEST SIDE.		EAST SIDE.	
FROM THE BATTERY TO		FROM THE BATTERY TO	
	Miles		Miles
Edgewater, N. J.....	8	Twenty-third Street .....	3
Pleasant Valley.....	10	Forty-second Street.....	4
Fort Lee. ....	12	One Hundred and Twenty-fifth Street.....	8
Englewood.....	13	Spuyten Duyvil .....	10
Nyack.....	28	Yonkers .....	17
Rockland Lake .....	34	Hastings .....	21
Haverstraw.....	40	Dobbs Ferry .....	22
Grassy Point.....	42	Irvington.....	26
Tompkin's Cove.....	44	Tarrytown.....	28
Iona Island.....	49	Sing Sing.....	35
Cranston's .....	52	Croton Point.....	44
West Point .....	53	Peskskill .....	48
Storm King.....	55	Anthony's Nose.....	50
Cornwall .....	56	Cold Spring.....	54
New Windsor .....	58	Fishkill.....	60
Newburgh .....	60	New Hamburg .....	67
Marlborough.....	68	Poughkeepsie.....	76
Milton .....	72	Hyde Park .....	81
Highland .....	77	Rhinebeck .....	90
West Park .....	82	Tarrytown.....	98
Ulster Landing .....	95	Tivoli .....	100
Rondout .....	96	Germantown .....	111
Saugerties .....	100	Hudson.....	120
Malden .....	105	Stockport.....	126
Smith's Landing.....	109	Stuyvesant .....	130
Catskill .....	115	Castleton.....	140
Athens.....	120	Troy .....	151
Coxsackie .....	126		
New Baltimore .....	133		
Coeymens .....	135		
Albany .....	145		

## THE PORT OF NEW YORK.

THE LIMITS OF THE PORT OF NEW YORK ARE AS FOLLOWS—

Both banks of the Hudson River, as far as a line crossing the river at a boundary between New York and Yonkers; both banks of the East River to a line drawn between Port Morris Dock and Lawrence, L. I.; all the shore of Staten Island; all the Kill von Kull; all the lower bay outside of a line drawn from about Hoffman's Island to the ship channel off Sandy Hook Point.

H. C. ROGERS.

J. C. CURRAN

POCAHONTAS COAL POCKETS FOR TUGS AND YACHTS.

COALING AT ALL HOURS,  
DAY AND NIGHT.

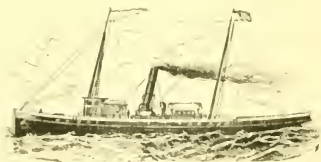
ROGERS & CURRAN.

COALING STATIONS:

Foot of 9th Street,	{	OFFICES:	{	Foot of 7th Street,
HOBOKEN, N. J.		Rooms 32 and 33, No 1 BROADWAY, N. Y.		HOBOKEN, N. J.

We have just completed a pocket on our new dock, foot of 9th Street, Hoboken, N. J., having removed from our former pier, foot of 35th Street, New York.

This dock and pocket has been built specially for coaling tugs and yachts, and, having every facility, we can coal over 100 tons per hour, thus ensuring promptness in loading.



The well known reputation of our Pocahontas Flat Top Semi-Bituminous Coal (it being recognized as standing at the head of the Steam Coals in this Country), warrants us in guaranteeing this coal as possessing the following advantages:—

**SAVING of TIME** in consequence of being able to generate steam quickly, and in large quantities.

**SAVING of EXPENSE**, as all parties using our coal claim that the amount of Pocahontas required in steaming is less than other coals, thereby saving largely in the consumption of coal.

**CLEANLINESS**: a very small amount of smoke is emitted from the smoke stacks, when POCAHONTAS COAL is being fired..

The Coal burns up clean, making a small percentage of Ash. Engineers have informed us that they have less than half the amount of Ash made by other Coals. It is also free from Clinker.

This Coal is used by the UNITED STATES NAVY DEPARTMENT as the standard coal in the trial tests.

WATER IS FURNISHED FREE OF EXPENSE.

We Coal at all hours day and night, including Sundays and Holidays.

# HOME INSURANCE COMPANY

## OF NEW YORK.

OFFICE, 119 BROADWAY.

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ASSETS, January, 1896.	=	=	=	=	=	=	<u>\$9,853,628 54</u>
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### LIABILITIES :

Cash Capital	\$3,000,000 00
Reserve Premium Fund	4,395,659 00
Unpaid Losses	571,731 41
Unpaid Re-Insurance, Commission on Uncollected Premiums and other claims	180,782 72
Net Surplus	1,705,455 41
	<u><u>\$9,853,628 54</u></u>

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### INLAND AND COASTWISE MARINE DEPARTMENT.

GEO. H. SMITH & HICKS, MARINE MANAGERS.

68 WILLIAM STREET, - - - NEW YORK.

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### FACILITIES FOR HANDLING LARGE LINES

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### ADJUSTING AND SURVEY BUREAU.

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LOUIS F. BURKE,

AVERAGE ADJUSTER.

ALLEN H. DUMONT,

INSPECTOR AND SURVEYOR.

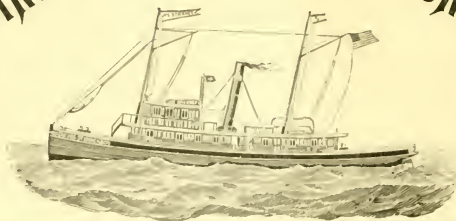
119 Broadway, N. Y.

Telephone,—1479 CORTLANDT.



SCULLY'S

TOWING AND TRANSPORTATION LINE



Offices: — No. 1 BROADWAY, N. Y.  
— SOUTH AMBOY, N. J.

TELEPHONE — 436 CORTLANDT  
— 101 SOUTH AMBOY.

TOWING AND TRANSPORTATION

TO AND FROM

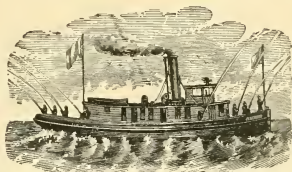
South Amboy, Port Johnson, Elizabethport and vicinity;  
and to all Points on Long Island Sound, Narra-  
ganset and Buzzards Bays, Etc.

By Steamers—Jos. Stickney, Thos. J. Scully, E. A. Parker,  
Sen. D. C. Chase and Mary Ann.



# BAXTER WRECKING CO.,

OWNERS OF WRECKING AND FIRE STEAMER



**JOHN FULLER,**

AND A FULL EQUIPMENT OF WRECKING PONTOONS FOR  
RAISING SUNKEN VESSELS AND CARGOES.

**STEAM PUMPS AND SUB-MARINE DIVERS.**

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**SCOWS, COVERED AND DERRICK BARGES,**  
WITH AND WITHOUT STEAM.

**FOR STONE,  
IRON, COAL, GRAVEL  
CEMENT.**



**SAND,  
LUMBER & OTHER  
MERCHANDISE.**

Office: 140 BROAD STREET, Corner South, NEW YORK.

**HARBOR, RIVER AND SOUND LIGHTERAGE**

TUGS, BARGES, CANAL BOATS, ETC., FOR SALE OR HIRE. INLAND MARINE INSURANCE  
SEA, RIVER AND GATE TOWING CONTRACTED FOR.

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Landing at Croton, Grassy Point and Verplancks Both Ways.



## THE PROPELLERS FANNIE WOODALL & PEEKSKILL

Will Leave NEW YORK, Foot of JANE ST.

Every Day at 3 p. m. except Saturday. Saturday at 2 p. m.

Returning will leave Lower Dock, Peekskill,

Every Day, (Sundays excepted), for New York, at 3 p. m.

**FREIGHT AND PASSENGERS.**

**PROMPTNESS, SAFETY AND DISPATCH AT  
LOW RATES!**

# WILLIAM S. BARTLEY.

TUGS, BARGES,  
CANAL BOATS, ETC., FOR  
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AND GATE TOWING CON-  
TRACTED FOR.

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## Derrick Barges and Scows

FOR STONE, IRON, COAL, GRAVEL, CEMENT, SAND, LUMBER & OTHER MERCHANDISE

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INLAND MARINE INSURANCE.

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Propeller H. R. HEATH

CAPTAIN AMBROSE BRADLEY.

Propeller WILLIAM FULLER

CAPTAIN CHAS. T. BRADLEY.

AND OTHERS.

Pier 56, foot of East 26th Street, New York.

# Bradley's Tide Table Calendars,

BY DAVID L. BRADLEY.

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HANDSOMELY PRINTED IN COLORS ON FINE CARDBOARD  
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## THE TIDE TABLE TABLETS

FOR EACH MONTH.

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Steamers. Floating Property and Marine Machinery Generally.

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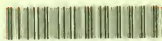








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